

OPERATIONAL LOGISTICAL SUPPORT OF UN PEACEKEEPING MISSIONS: INTERMEDIATE LOGISTICS COURSE

(Op Log 060915)



**The United Nations Institute for
Training and Research
Programme of Correspondence Instruction in
Peacekeeping Operations**

Course Author:
Major Donald Leslie
Canadian Forces, Retired

Series Editor:
Harvey J. Langholtz

**UNITAR Training Programme
of Correspondence Instruction
in Peacekeeping Operations**
Dag Hammarskjöld Centre
Box 20475
New York, NY 10017

**Programme UNITAR de Formation
Par Correspondance Aux
Opérations de Maintien de la Paix**
Palais des Nations
1211 Genève 10
Suisse

OPERATIONAL LOGISTICAL SUPPORT OF UN PEACEKEEPING MISSIONS: INTERMEDIATE LOGISTICS COURSE

(Op Log 060915)

**A course produced by
The United Nations Institute for Training and Research,
Programme of Correspondence Instruction**

**Course Author:
Major Donald Leslie
Canadian Forces, Retired**

**Series Editor:
Harvey J. Langholtz**

**© COPYRIGHT 2005
UNITAR POCI**

Address all correspondence to:

**UNITAR POCI
Dag Hammarskjöld Centre
Box 20475
New York, NY 10017-0009**

OPERATIONAL LOGISTICAL SUPPORT OF UN PEACEKEEPING MISSIONS: INTERMEDIATE LOGISTICS COURSE

TABLE OF CONTENTS

FOREWORD

Format of Study.....	v
Method of Study	vi

LESSON 1: AN OVERVIEW OF UNITED NATIONS OPERATIONAL LOGISTICS1

1.1 Introduction
1.2 Logistics Support Concepts
1.3 Operational Support Tasks
1.4 Command and Control of UN Logistics
1.5 Mission Headquarters Support Structure
1.6 Field Operations
1.7 Financial Arrangements

LESSON 2: UNITED NATIONS OPERATIONAL LOGISTICS PLANNING21

2.1 Support Concepts
2.2 Logistics Planning Considerations
2.3 Phases of Peacekeeping Operations
2.4 Preparations
2.5 Verification

LESSON 3: SUPPLY33

3.1 Introduction
3.2 Supply Concepts
3.3 Supply Planning
3.4 Supply Operations
3.5 Food Services
3.6 Ammunition and Explosives
3.7 Petroleum, Oils and Lubricants

LESSON 4: ENGINEERING SUPPORT57

4.1 Introduction
4.2 Engineering Logistics Concepts
4.3 Field Mission Engineering Support Concepts
4.4 Guidelines for Accommodation, Facilities & Utilities
4.5 Infrastructure
4.6 Fire Protection Services
4.7 Environmental Protection
4.8 Geographic Support

LESSON 5: TRANSPORTATION	75
5.1 Organization	
5.2 Methods and Procedures	
5.3 Tasks and Responsibilities	
5.4 Transportation Procedures	
LESSON 6: AVIATION AND AIR SERVICES	87
6.1 Introduction	
6.2 Organization	
6.3 Acquisition and General Guidance to Contribution	
6.4 Transport of Passengers and Cargo	
6.5 Airfield Management	
6.6 Maintenance	
6.7 Flight Safety	
LESSON 7: MAINTENANCE	99
7.1 Maintenance Doctrine	
7.2 Maintenance Systems	
7.3 Maintenance Planning	
7.4 Planning Guidelines and Responsibilities	
7.5 User Maintenance	
7.6 Request for Repair	
7.7 Recovery Request	
7.8 Inspection Policy and Procedures	
7.9 Repair Parts Supply	
7.10 Maintenance Policies	
7.11 Local Contract - Repair and Spares	
LESSON 8: MEDICAL	117
8.1 Introduction	
8.2 Operational Medical Support Precepts and Principles	
8.3 Medical Support Concept	
8.4 Medical Support Planning Process	
8.5 Medical Support Policies and Procedures	
LESSON 9: COMMUNICATIONS.....	143
9.1 Introduction	
9.2 Role & Organization	
9.3 Implementation	
9.4 Communications Security	
9.5 Communications Training	
9.6 Provision of Equipment	

LESSON 10: POSTAL AND COURIER SERVICES.....	153
10.1 Postal Services	
10.2 Postal Operations	
10.3 Free Mail Service	
10.4 Mail and Diplomatic Pouch Unit	
10.5 Base Post Offices	
10.6 Courier Services	
GLOSSARY	
Table of Acronyms	166
Logistic Definitions	169
END-OF-COURSE EXAMINATION.....	173

FORMAT OF STUDY

This course is designed for independent study
at a pace determined by the student.

Course format and materials permit:

- MODULAR STUDY
- EASE OF REVIEW
- INCREMENTAL LEARNING

Materials needed for the completion of this course are
enclosed with the course listed below:

- Course booklet: "Operational Logistical Support of UN Peacekeeping Missions: Intermediate Logistics Course"
- End-of-Course Examination
- Answer Sheet for End-of-Course Examination
- Return Envelope for End-of-Course Examination

STUDENT'S RESPONSIBILITY

The student is responsible for:

- Learning course material
- Completing the End-of-Course Examination
- Submitting the End-of-Course Examination

**Please see the End-of-Course Examination Answer Sheet
for submission instructions.**

METHOD OF STUDY

The following are suggestions for how to proceed with a UNITAR POCI Course. Though the student may have alternate approaches that are effective, the following hints have worked for many.

- Before you begin actual studies, first browse through the overall course material. Notice the lesson outlines which give you an idea of what will be involved as you proceed.
- The material should be logical and straightforward. Instead of memorizing individual details, strive to understand concepts and overall perspectives in regard to peace-keeping operations.
- Set up guidelines regarding how you want to schedule your time.
- Study the lesson content. At the beginning of each lesson, orient yourself to the main points. If you are able to, read the material twice to ensure maximum understanding and retention, and let time elapse between the readings.
- When you finish a lesson, take the End-of-Lesson Quiz. For any error, go back to the lesson section and re-read it. Before you go on, be aware of the discrepancy in your understanding that led to the error.
- After you complete all lessons, take time to review the main points of each lesson. Then, while the material is fresh in your mind, take the End-of-Course Examination. It is generally best to complete the End-of-Course Examination in one sitting.
- Your exam will be scored and if you achieve a passing grade of 75% or higher, you will receive a Certificate-of-Completion. If you score below 75%, you will be given one opportunity to take a second version of the End-of-Course Examination.
- One note of explanation of spelling is in order. There are six official languages at the United Nations. One of these is English as used in the UK. UNITAR POCI courses are written using English spelling.



LESSON 1

AN OVERVIEW OF UNITED NATIONS OPERATIONAL LOGISTICS

- 1.1 Introduction
- 1.2 Logistics Support Concepts
- 1.3 Operational Support Tasks
- 1.4 Command and Control of UN Logistics
- 1.5 Mission Headquarters Support Structure
- 1.6 Field Operations
- 1.7 Financial Arrangements

LESSON OBJECTIVES

This lesson will provide an overview of the conduct of logistics in a United Nations mission area. It will provide some of the major principles and concepts that govern logistics support such as the Lead Nation Concept and discuss the impact of the new reforms for reimbursement and the Contribution Agreement. General roles and responsibilities will also be covered.

By the end of Lesson 1, the student should be able to meet the following objectives:

- Understand the different types of UN Missions;
- Describe logistics support concepts and their application;
- Describe logistics command and control and the division of responsibilities between the UN Secretariat and the Mission headquarters; and
- Understand the financial arrangements and budgetary system used to finance peacekeeping missions.

The student should note that the main reference for this course is the United Nations Operational Support Manual (OSM), first published in 1995. The OSM is currently under review and may vary from some of the topics and descriptions contained in this course. The Department of Peacekeeping Operations, Office of Mission Support should be contacted for any clarifications.

1.1 Introduction

The last decade of this century has seen larger and more complex UN peacekeeping missions than in the previous five decades of the Organization's existence. New procedures and terminology have been introduced to meet the challenges encountered in peacekeeping operations. In his 1992 "*Agenda for Peace*," Secretary-General Boutros Boutros-Gali described the increasing size, scope, and complexity of UN missions and defined the three types of missions collectively referred to as "peacekeeping" as preventive diplomacy, peacekeeping and peace making. In the 1995 "*Supplement to the Agenda for Peace*," additional terms, such as peace building, peace enforcement, peace enhancement and disarmament were introduced, further broadening the scope of missions now undertaken in whole or in part by the UN.

Though none of these terms are found in the UN Charter, they have come to be grouped as Chapter VI and Chapter VII interventions. These Chapters define the measures to be taken by the Security Council and Member States to resolve international disputes. Generally Chapter VI missions involved peaceful dispute resolutions between the parties. These types of mission tend to be both UN sanctioned and sponsored. Chapter VII missions on the other hand involve the use of force to maintain international peace and security. Typically these missions are only sanctioned by the UN, with the bulk of the support and finances coming from the Troop Contributors or other Member States.

It is important to bear in mind the type of mission when planning and conducting peacekeeping operations. This is particularly important for determining logistics support as the type of mission may define where support to the force will originate and who has the responsibility for sustainment of the force. UN operations are complicated by a number of peculiar characteristics that fundamentally impact upon the provision of operational support:

- Political complexity and dynamic nature of each operational scenario;
- Geographic, topographic and climatic variations of theatres of operations;
- Number of individual nations involved in each operation;
- Variations in national standards in training, equipment, operational procedures and operational support; and
- Language and communications differences.

1.2 Logistics Support Concepts

UN missions can vary in size from a small group of observers, who may be civilians, police, military or a mixture, to a combined operation of land, sea and air forces involving tens of thousands of personnel. Consequently, various logistic concepts will need to be considered to fulfill a mission's logistic requirements. Any concept will have to be tailored for a specific mission taking into account the operational task, space and time, manpower, materiel, environment, climate, infrastructure and resources available. It may include elements that are mobile or static, civilian or military, with in-theatre warehousing or national re-supply lines or, in most cases, a combination of all elements. There are, however, a number of concepts that have proven their worth in past operations.

Self Reliance Concept. In some smaller missions, reliance on the local economy may be the best method of support. There may be a requirement for a small reception team at a point of entry to maintain logistic links with contributing member states and the UN. While specialist repair of vehicles, communication or technical equipment may be achieved out-of-theatre, self-sufficiency is highly effective in many areas of the world where a relatively modern civilian infrastructure is available. UN technical staff may also effect repairs.

Lead Member State Concept. Medium sized missions may be centered around one principal member state's contingent. In such cases that member state may assume responsibility for all logistic support and would usually maintain re-supply links to its home base. Other elements of the force would rely on the principal member state for their administrative and logistic needs. Bilateral or UN negotiated agreements may be required between the different elements of the mission to ensure financial reimbursement of the services provided. A national representation within the lead member states' logistic organization will ensure that national interests are met.

The Force Logistic Support Group Concept. Specialized logistic support groups can better support large missions with considerable equipment and volume of transactions. One member state may be required to assume overall responsibility for the coordination of the Force Logistic Support Group (FLSG) and to incorporate logistic units (National Support Elements - NSEs) from the contributing member states into the Force Logistic Base. Implementing this concept is a function of the planning process and will be coordinated by OMS and the Force Headquarters to coordinate. It is prudent to accept that full interoperability is not likely to be achieved and that a cooperative effort is likely to be required.

Civilian Contract Support Concept. As missions stay longer in an area, the opportunities to arrange logistic support from civilian contractors increase. Assuming that civilian support is possible and cost effective, the net effect is a release of military personnel for other employment.

1.3 Operational Support Tasks

The operational support responsibility of the UN Secretariat for Peacekeeping Operations is:

"To plan, organize, mount, sustain and account for duly authorized UN operations."

This responsibility implies performance of the individual services and integration and coordination of all types of operational support.

Integration. Operational support functions at an UN field mission must be considered as 'common' to the mission as a whole, and provided on a uniform and equitable basis, depending on assessed priorities, irrespective of whether the unit or element dispensing the function consists of military, UN civilian staff, civilian staff provided by governments, commercial contractor personnel, or a combination.

Coordination. To be effective, the coordination function of UN operational support should draw together all those elements at the mission and at the UN Headquarters which are involved in tasking or furnishing operational support to peacekeeping operations. This requirement for coordination implies fully integrated offices at both locations. The different support activities for UN operations are discussed in subsequent lessons.

Sources of Logistic Support. The UN normally draws logistic support for its field missions from a combination of five main sources:

- UN infrastructure, including other UN HQs, field missions HQs and on occasion, other UN agencies (UNHCR, WHO, UNDP, etc);
- Functional logistics units or elements provided by contributing countries and operating under the auspices of the UN;
- Commercial sources engaged by the UN;
- Contributing countries via stand-alone national arrangements;
- Support independently provided by member states in support of specific UN operations.

1.4 Command and Control of UN Logistics

The responsibility for direct administrative and logistics support to peacekeeping missions operations within UNHQ is detailed below.

The Department of Peacekeeping Operations (DPKO). The DPKO is responsible for developing policy; planning and conducting peacekeeping operations; and acting as focal point between the Secretariat and Member States on all operational and administrative aspects of peacekeeping. Figure 1-1 shows the current organization of DPKO.

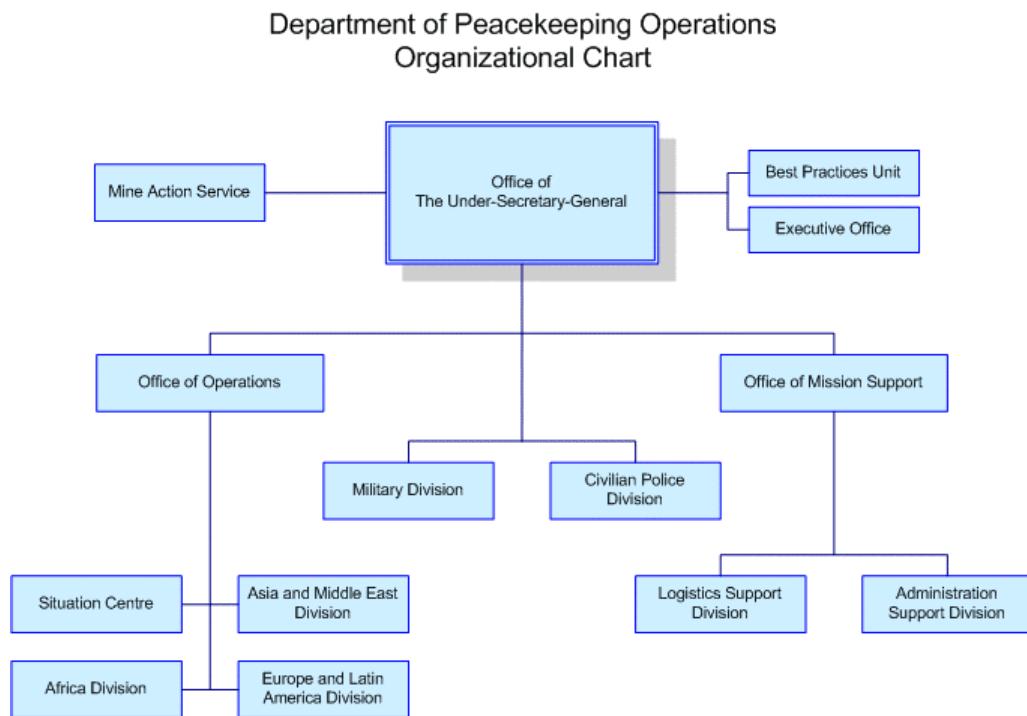


Figure 1-1

The responsibilities of the DPKO Division most directly involved with peacekeeping missions are described below.

Office of Operations. This office is responsible for the daily executive direction of peacekeeping operations; liaison with other Departments (particularly Political Affairs and Humanitarian), to ensure guidance to the field is coordinated. It has three major divisions namely, Europe and Latin America, Asia and Middle East, and Africa, and the Situation Centre.

Military Division. This Division consists of three units: Military Planning Service, Current Military Operations Service and Force Generation and Military Personnel Service. It prepares comprehensive operational plans and timetables for new and on-going peacekeeping operations; determines detailed requirements of new peacekeeping operations and other field missions; examines the impact of mandate change on existing missions; and maintains standby arrangements with governments for supplying troops, equipment, and finances.

Civilian Police Division. This Division is responsible for policy, information, mobilization and programme support for the provision of civilian police services to peacekeeping and humanitarian missions.

Office of Mission Support. The OMS is responsible for the overall coordination of administrative and logistics support for field missions' development and implementation of policies and procedures concerning peacekeeping operations; planning and coordinating field mission planning, police, demining, and training activities; liaising with Member States and other organizations regarding the contribution to peacekeeping operations and stand-by arrangements; and the promulgation of field missions administrative and financial policies and regulations. It consists of two divisions: the Logistics Support Division (LSD) and the Administration Support Division (ASD).

The Logistics Support Division is where much of the operational logistics planning and coordination occurs at UNHQ. The Division is sub-divided into three services as shown in Figure 1-2.

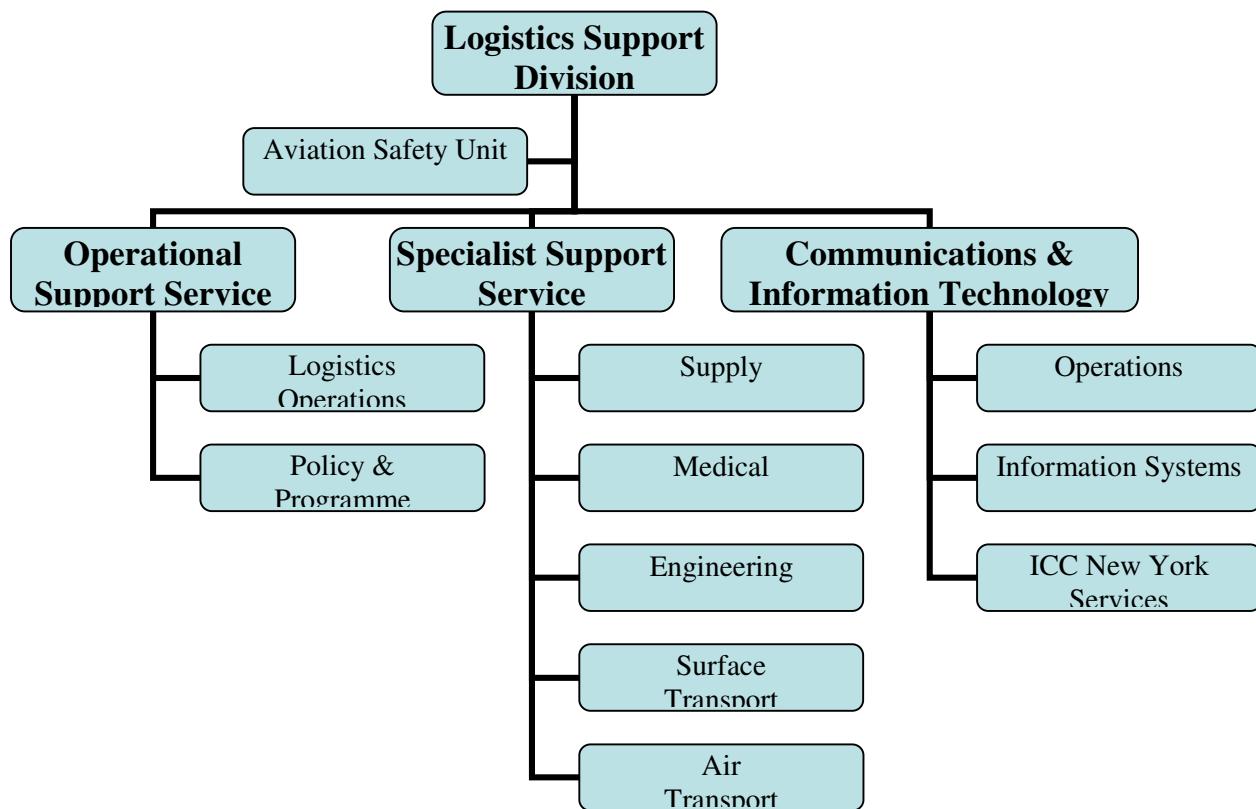


Figure 1-2

The Administrative Support Division handles the financial and personnel management aspect of mission operations. The Division is sub-divided into two services: Financial Management and Support Services (FMSS) and Personnel Management and Support Services (PMSS). FMSS also handles Memorandums of Understanding (MOU) and claims with Member States for reimbursement for the provision of troops and equipment. PMSS coordinates civilian human resource planning, recruiting and training and manages travel services for DPKO missions.

1.5 Mission Headquarters Support Structure

Figure 1-3 shows the structure of a typical mission headquarters. The actual composition of the headquarters will vary depending on the size and functions required for the mission.

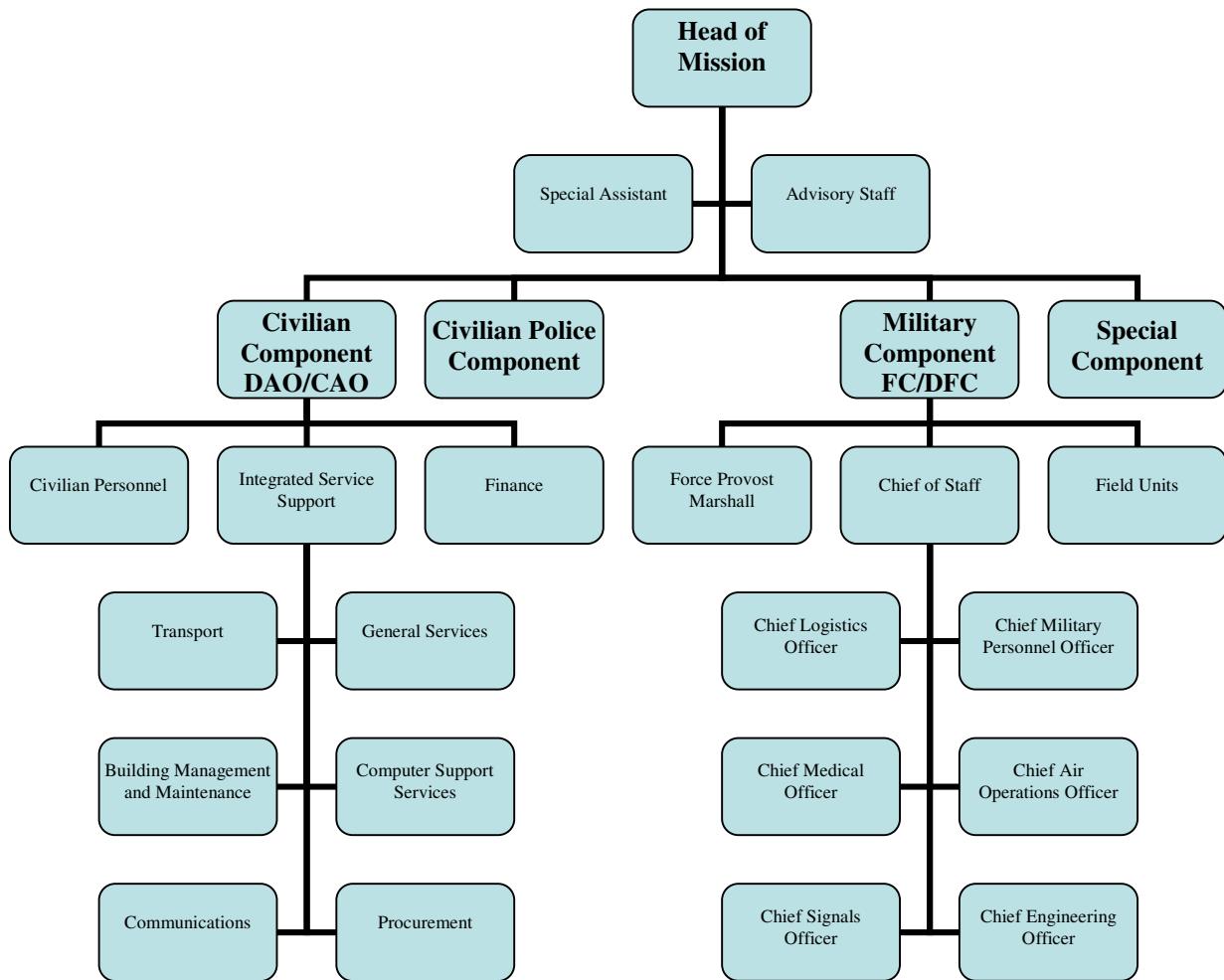


Figure 1-3

The following paragraphs describe the roles and responsibilities of the sections depicted above.

Head of Mission. Depending on the mandate and makeup of a particular operation, the Secretary-General (SG) may appoint a Special Representative of the Secretary-General (SRSG) to exercise overall command of all components of a UN operation (electoral, civil affairs, military, civilian police and administration, etc.). UN specialist agencies (such as UNHCR, WHO or UNICEF) may also be made responsive or accountable to the SRSG for particular aspects of multi-role missions.

From an operational logistics point of view, there are two major components (Civilian and Military) under the Head of Mission that are responsible for the efficient and effective delivery of logistics services.

Civilian Component

Within the civilian component of the headquarters, the following appointments are involved in operational support:

Director of Administration (DOA) and/or Chief Administrative Officer (CAO) is appointed by and is responsible to the OMS of DPKO at UN Headquarters. The DOA/CAO is responsible for carrying out all administrative functions of the mission efficiently and economically. The DOA/CAO acts as the principal advisor to the Head of Mission on all matters relating to the administration of the mission. For personnel, technical and transportation services matters, this responsibility relates only to civilians; in financial and procurement matters, this extends to the whole Mission including the military components. In Missions where military support components are not available, the CAO exercises control over these functions through contractual arrangements or with international civilian staff.

Within the Director of Administration/Chief Administrative Officer's organization, the following sections provide support:

Computer Support Services Section. Computer-related services to all components of the mission and arranging for programming and hardware support.

Civilian Personnel Section. The Chief Civilian Personnel Officer (CCPO) is responsible for the administration of the civilian staff of the mission in accordance with the UN staff rules and regulations and other administrative instructions, and provides advice on the interpretation and implementation of UN staff rules and regulations.

General Services Section. The Chief General Services Officer (CGSO) provides:

- Mail, courier and central registry operations;
- Service institutes;
- Reproduction services;
- Travel and traffic services in coordination with the military movement control staff;
- Office supplies and general stores in coordination with military supply staffs;
- UN property control and inventory management;
- Claims, Property survey and investigations; and
- Security and safety in consultation with the Force Provost Marshall.

Finance Section. The Chief Finance Officer (CFO) is responsible for the maintenance of the mission budget, commitment accounting and all financial transaction settlements (travel expenses, per-diem payments, locally hired personnel pay and benefits, materiel and services).

Building Management and Maintenance Section. The Civilian Chief Engineering Officer (CCEO) is responsible, in conjunction with the CEO, for accommodation and construction services, infrastructure engineering and electrical and generator services for the HQ area.

Communications Section. The Chief Communications Officer (CCO) provides global communications between UN missions and UNNY, intra-theatre communications services to civilian components and military installations not covered by military signal elements and maintenance of UN owned communications equipment.

Transport Section. The Chief Transportation Officer (CTO) is responsible for the coordination, allocation, distribution, accounting and maintenance of UN owned vehicles. The CTO may also run a motor pool of UN owned and rental vehicles.

Procurement Section. The Chief Procurement Officer (CPO) procures all materiel and services required by all components of the mission.

Military Component

Within the military headquarters, the following appointments are involved in operational logistics support:

Force Provost Marshall (FPM). Responsible for coordinating physical security over UN personnel (in consultation with UN security staffs), property and materiel in consultation with the military operations staff, conducting police investigations (in cooperation with local authorities) and traffic control.

Chief Logistics Officer (CLO). Responsible to the Chief of Staff (COS) for directing the logistics support for the Force. He must coordinate with the DOA/CAO to ensure that logistics activities conform to the financial constraints set by the UN. The Chief Logistics Officer will establish, organize and operate the logistics base and prepare the Standard Operating Procedures that will govern the functioning of the mission logistics support system. He will be assisted in his task by a small policy and planning staff at Force Headquarters and an operating staff in the logistic base who will coordinate:

- Supply support and services including re-supply, replenishment, warehousing and materiel services;
- Maintenance including military vehicle and equipment repair beyond basic/unit capability;
- Transport services including forward re-supply, troop or personnel movement via road, air, sea and rail as well as vehicle safety;

- Food services to include dietary services, catering standards and in consultation with the medical staff and hygiene standards;
- Postal and courier services in consultation with national contingents and the mail operations section within the Directors of Administration/DOA/CAO General Services Branch.

Note: CLO will establish and control logistics base in missions with military units only. In Observer missions, the CAO will establish the logistics base.

Chief Military Personnel Officer (CMPO). Responsible for those aspects of UN logistics related to:

- Personnel administration such as identification, unit personnel status, leave policies, administrative investigations and board of inquiry;
- Personnel recreation and welfare to meet prescribed objectives of morale, and recreational and sports activities;
- Maintaining the military component central registry and records section;
- Coordinating the production and issue of military component publications.

Chief Medical Officer (CMedO). Responsible for policies and directives regarding handling and treatment of mission civilian and military personnel, preventive medicine (hygiene) and medical air MEDEVAC in consultation with the Air Staff, and in accordance with the personnel directive on Medical Evacuations for UN Staff. In addition, this officer is responsible for the integration of services provided by multiple contingents, medical elements and air MEDEVAC systems. The CMedO coordinates the medical requirements for repatriation or out-of-theatre air MEDEVAC of UN personnel with the CAO.

Chief Air Operations (C Air Ops). Responsible for the coordination of all air resources in support of operations and issuing air taskings.

Chief Signals Officer (CSO). In consultation with the Chief Communication Officer (CCO), responsible for coordinating the provision of in-theatre communications for the military component. In addition, providing computer-related services in terms of requirements, training and maintenance for the military component.

Chief Engineer Officer (CEO). Responsible for the coordination of field engineer support, accommodation and construction services in consultation with the DOA/CAO's Building Management Services' officer.

1.6 Field Operations

The organizational structure of a specific mission will be tailored by its mandate. As missions mature this organizational structure may change. Although missions differ in their specific organizational structure, they have common elements, including:

- A Head of Mission; Special Representative of the Secretary-General (SRSG) or Force Commander (FC);
- An administrative component;
- A military component;
- A civilian police component; and
- Specialist civilian components (such as electoral, referendum and legal).

Support for peacekeeping operations can be provided by the mission military component, or the host nation and contractors. However, the main support is provided by the Director of Administration (DOA)/Chief of Administration (CAO).

Military Operational Support Units. The extent of the military component's involvement in operational support depends on the offers from Troop Contributing Countries and will depend upon each unit's level of self-sufficiency, the extent of local and international contracting for materiel and services, and the general infrastructure within the theatre of peacekeeping operations.

Supply Units. Two types of supply units may be required for a particular mission. First, mission-wide supply depots in cases where the size of the mission is very large in number of personnel and in geography. Second, conventional (composite) supply units operating as part of a national multi-role logistics battalion/unit (responsible for supply, transport and maintenance). In all cases, supply agencies should be capable or requisitioning, receiving, warehousing, packaging, issuing and disposing of materiel and stores destined for all components of a mission.

Field and Multi-Role Engineer Units. These units should be prepared for detached operations. Their operational field engineer tasks include Explosive Ordnance Reconnaissance (EOR) and mine awareness/sweeping/removal tasks. If construction engineering expertise is required this will cover the basic requirements of both horizontal and vertical construction engineering. Moreover, multi-role engineer units shall be capable of providing potable water production and treatment. Technical engineering expertise such as engineer tradesmen, draftsmen, structural design, electrical design, specification writers and inspectors should form part of the unit where local hiring is limited. For operational reasons, engineer units may be grouped together. Should this occur, the Chief Engineer would assume command of the grouping.

Transport Units. Transport units may be part of a larger national or multinational logistic organization. Transport units will manage both Contingent owned and UN owned vehicles comprising the mission pool of transportation resources beyond unit capability. Although the precise types and quantities of vehicles may vary, transport units will usually be deployed with a preponderance of general-purpose vehicles (cargo and buses).

Movement Control. Movement Control HQ will normally be collocated with the civilian component's traffic section where effective coordination of this function can be exercised. The unit will be expected to cater to detached operations. Hence, it is usually formed of a number of detachments operating at airports, seaports and railheads.

Air Units. These units are generally sub-divided into the following components:

- Liaison Transport;
- Heavy Tactical Transport;
- Utility Short Take-Off and Landing (STOL) Transport;
- Medium Tactical Transport Helicopter;
- Utility Tactical Transport Helicopter; and
- MEDEVAC/Air Rescue fixed-wing planes and helicopters.

Each country and contractor providing air assets and personnel will include sufficient elements to form the mission's air operations control centre and air staff, air maintenance capabilities, and air-to-ground and air-to-air communications. One of the air units might be expected to deploy with a meteorological element. Traffic control, flight safety, airfield management as well as mobile air movements sub-units and elements may be called in. Size and final structure will depend upon the role assigned to each unit.

Maintenance and Repair Units. Maintenance support and resources required for a particular mission will largely depend upon facilities available locally and the level of self-sufficiency of mission units. Maintenance elements may form part of a larger national or multinational logistic group. The principal task of maintenance units is vehicle repair and recovery. Therefore they must deploy with sufficient vehicle recovery trucks to cater to the worst case scenario. Other maintenance units will include the equipment necessary to perform repair on electromechanical and electronic components.

Medical Units. The size, composition and mission of the medical units depends upon the size of the mission or force, the threat against these forces, distances between levels of care and time constraints in evacuation, the medical infrastructure of the country where the mission is deployed, the contingent providing the support, and the level of self-sufficiency in each of the units. Structure of the units and their configuration will follow international definitions of levels of care, capabilities and capacities at each of these levels. Lines of communication, transport resource availability and response, including air, and the distances involved between levels of care will determine the medical capabilities required.

Communications Units. Operating from a central unit headquarters, normally collocated with Mission and/or Force headquarters, the Force Signals unit fulfils its role (in consultation and coordination with the UN Communications element) by providing global UN communications in early stages of mission deployment (if required), communications detachments Mission, Force, or subordinate headquarters and repair of military pattern communications equipment if beyond unit capability.

Postal Unit. This unit provides a mail service for deployed personnel interfaces with national contingents, may have detachments located in major UN locations and could be responsible for the movement of classified and unclassified official mail within the operational area.

Local and Regional Support. A Memorandum of Understanding (MOU) may be negotiated with the host country or a neighbouring country's government for the provision of goods and services such as:

- Health services;
- Labor;
- Public facilities and installations;
- Search and rescue;
- Telephone services; and
- Interpreters.

Private Sector. Private sector support via contracting arrangements (particularly local arrangements) might be made for:

- Services (public utilities and services and other infrastructure support);
- Facilities and assistance to procure supplies and petroleum products;
- Laundry and dry cleaning;
- Air transport services; and
- Repair and maintenance contracts.

1.7 Financial Arrangements

This section describes the UN financial system and sets out in broad terms the principles and procedures to be followed in order to secure reimbursement of eligible costs.

Financial Responsibilities within the UN Secretariat

The Methods of Financing. The methods of financing United Nation's peacekeeping operations may vary depending on the type of operation and on the decisions taken by the Security Council in respect to each one. The common denominator is that the budgets of peacekeeping operations must be approved by the General Assembly taking into account the advice of the Advisory Committee on Administrative and Budgetary Questions (ACABQ) and of the General Assembly Fifth Committee. This is accomplished through:

- A regular UN budget;
- Assessed contributions in accordance with a formula determined by the General Assembly; and
- Voluntary contributions. The UN must rely entirely on voluntary contributions to finance its share of the cost of that operation.

After political departments recommend an operation to the Secretary-General, a survey mission is sent to the area targeted for an operation to evaluate the required resources. The Secretary-General submits a report prepared by the political departments to the Security Council. This report indicates the level of resources required. Based on this information, OMS prepares preliminary estimates that are reviewed by the Controller's office. The Secretary-General attaches this estimate to the report to the Security Council. The Security Council approves an operation for a specific period of time, often six months.

OMS prepares a detailed budget, which is reviewed by the Budget Unit and submitted as the Secretary-General's proposed total budget. The budget is reviewed by the Advisory Committee on Administrative and Budgetary Questions.

The General Assembly approves the budget. The Secretary-General has the authority to spend for that particular operation.

Financial Responsibilities within a Mission Area

DOA/CAO. Once funds are allocated for the purpose of supporting a mission, the DOA/CAO will then be issued with instruments of "Delegation of Authority" by the Secretary-General as required for the proper functioning of the mission. The financial limits of such authority, including those for the purchase of non-expendable property, shall be specified in each case and will include the authority to enter into support contracts, in addition to limits on property survey and claims review.

The DOA/CAO is responsible for overall supervision of financial management systems, budgetary control, preparing and submitting budget estimates for the mission, when required, and reconciliation of the financial and related requirements of the mission.

Chief Finance Officer (CFO). Under the general supervision of the DOA/CAO, the CFO is responsible for:

- Approving mission payments and maintaining the mission accounts;
- Coordinating the preparation and production of budget estimates and program budgets for the mission; and
- Ensuring full implementation of and compliance with all existing UN financial rules, regulations, instructions and procedures laid down in the UN Financial Manual.

Financial Agreements with the UN

Financial agreements with the UN will normally be included as part of the Contribution Agreement negotiated between respective contributing states and the UN. This agreement will detail, amongst other matters, the financial responsibilities of each party.

Cost Calculation. When calculating costs, which may be charged to the UN, it is the general practice only to seek recovery of the additional costs to the troop contributing member state. In some instances such as capital purchase, this will equal the full cost of providing a

service. Full visibility of all costs, which are to be the subject of reimbursement by the UN, will be required if payment is to be authorized. Lack of supporting documentation will likely result in significant delay or even non-payment.

There may be some occasions where a member state decides not to seek recovery of its legitimate costs from the UN. On other occasions the UN may agree that the costs incurred will be credited as an offset against assessed contributions. More commonly a member state may decide to deploy more assets than the UN has sought as a contribution, on the understanding that the additional resources will be funded nationally (and remain under the direct control of the state concerned). Some national deployments in support of the UN contain elements of cost, which are not accepted as a legitimate charge by the UN. These can cover such diverse matters as expenditure on the welfare of troops or the provision of some natures of ammunition. Before agreeing to introduce new equipment into theatre, or implementing improvements to the deployed troops' conditions of service, contributing states must establish whether they will be eligible for UN reimbursement or whether the cost incurred will be a national funding responsibility. Such inquiries should be addressed through member states' permanent missions to UNNY.

Nature of Reimbursement. Most cost reimbursement is authorized through New York on presentation of the necessary documentation by the troop contributing state. The following list, although not exhaustive, details those reimbursable costs that a member state may incur when contributing to a UN mission:

- Contribution Agreement for Contingent Owned Equipment (COE);
- Mission subsistence allowance;
- Standard troop cost reimbursements including elements for personal clothing, equipment and ammunition;
- Welfare costs including an element for recreational leave;
- Rations;
- Daily allowance to troops;
- Travel to mission area, rotation and repatriation;
- Death and disability awards;
- Locally recruited staff salaries;
- Rental and maintenance of premises;
- Renovation of premises;
- Building materials;
- Utilities;
- POL;
- Vehicle insurance (if incurred);
- Loss/write-off of equipment valued over US\$250,000.00; and
- Damage sustained in transit.

Letters of Assist (LOA)

When essential items or services are not available through commercial sources, a requisition, known as a Letter of Assist (LOA), may be raised for the requisitioning of that item from a Government whether or not they are supplying troops to the mission. LOAs can involve both UN Owned Equipment (UNOE) and Contingent Owned Equipment (COE), and can be used for extraordinary events not covered under a Contribution Agreement (e.g. equipment sales). Reimbursement for the provision of the item will be processed through UNNY. The authority for the approval of LOA always remains with the Office of Mission Support (OMS) in the United Nations Headquarters, New York (UNHQ NY).

Since 1996, the UN has adopted the Contingent Owned Equipment System as a means of reimbursing Member States for their contribution of troops, equipment and materiel. The COE System applies standard rates to generic categories of equipment and services. The new system replaces the In/Out Survey method for reimbursement, which paid depreciation rates to Member States on a long list of major and minor equipment.

LESSON 1
END-OF-LESSON QUIZ

1. Which of the following is not a term used by SG Boutros-Boutros Gali to describe peacekeeping?
 - a. peace enhancement
 - b. peace building
 - c. disarmament
 - d. law enforcement
 - e. none of the above
2. In the UN Charter, the term peacekeeping is found in:
 - a. Chapter VII
 - b. Chapter VI
 - c. Chapter I
 - d. Appendix E - Guidelines to Troop Contributors
 - e. none of the above
3. Which of the following is not a UN logistics support concept?
 - a. Host Nation Support
 - b. Civilian Contract Support
 - c. Self-reliance Support
 - d. Force Logistics Support
 - e. none of the above
4. Which organization in UN Headquarters is responsible for developing policy, planning and conducting peacekeeping operations?
 - a. Office of Mission Support
 - b. Department of Peacekeeping Operations
 - c. Office of Operations
 - d. Office of the Military Adviser
 - e. none of the above
5. The DAO/CAO is appointed by:
 - a. the Special Representative to the Secretary-General
 - b. the Office of Mission Support
 - c. the Head of Mission
 - d. the Force Commander
 - e. none of the above

6. The control and inventory management of UN property is the responsibility of:
 - a. the CLO
 - b. the CEO
 - c. the CPO
 - d. the CGSO
 - e. none of the above

7. Who approves the budget for peacekeeping operations?
 - a. the ACABQ
 - b. the General Assembly
 - c. the Fifth Committee
 - d. the Security Council
 - e. none of the above

8. What is the normal time period that Security Council approves an operation?
 - a. three months
 - b. six months
 - c. twelve months
 - d. eighteen months
 - e. none of the above

9. Which of the following is not normally reimbursable by the UN?
 - a. loss of equipment over US\$ 250,000.00
 - b. rental and maintenance of premises
 - c. special natures of ammunition
 - d. blood products
 - e. none of the above

10. The Letter of Assist is a method for requisitioning goods and/or services from which of the following?
 - a. Local contractors
 - b. Office of Mission Support
 - c. a Government
 - d. a UN Logistics Base
 - e. none of the above

**LESSON 1
ANSWER KEY**

1. d. Law enforcement
2. e. none of the above
3. a. Host Nation Support is used when available but is not a support concept.
4. b. Department of Peacekeeping Operations
5. b. the Office of Mission Support of the Department of Peacekeeping Operations
6. d. the Chief General Services Officer
7. b. the General Assembly
8. b. six months, most of the time
9. c. special natures of ammunition
10. c. a Government



LESSON 2

UNITED NATIONS OPERATIONAL LOGISTICS PLANNING

- 2.1 Support Concepts
- 2.2 Logistics Planning Considerations
- 2.3 Phases of Peacekeeping Operations
- 2.4 Preparations
- 2.5 Verification

LESSON OBJECTIVES

This lesson covers the planning and preparation for the conduct of logistics in a United Nations mission area. The lesson will illustrate some of the major factors that govern the planning of logistics support and discuss the impact of the new reimbursement reforms and the Contribution Agreement. General roles and responsibilities will also be covered.

By the end of Lesson 2, the student should be able to meet the following objectives:

- Identify the planning factors and considerations which influence operational logistics planning;
- Understand the planning process;
- Identify the phase of a mission and their related logistics activities; and
- Understand the preparations required for the provision of troops, equipment, materiel and services to peacekeeping missions.

2.1 Support Concepts

The UN logistic system relies on the self-sufficiency of member states at unit level for a given period, normally between 60 and 90 days. This period is designed to allow time for the mission administration to organize the Mission Headquarters and the UN mission logistic structure, to acquire real estate and to conclude the Status of Forces Agreements, contracts and local Memoranda of Understanding.

Following this period, the UN will provide bulk supplies, such as water, fuel and rations; common user items including UN clothing, domestic consumables, batteries, some vehicle spares, accommodation stores and services such as cleaning, laundry and waste disposal. In the case of all but the smallest missions, this continuing support depends on the UN identifying a member state, or states, who may accept the responsibility of forming the structure of the Force Logistic Support Group (FLSG).

Notwithstanding the formation of a FLSG, the self-sufficiency of member states with respect to elements of re-supply, particularly technical spares, national clothing and replacement national equipment, is essential. Therefore national lines of supply are always required.

Integrated Logistic Support. The process by which all available materiel, administrative and sustainment systems are combined to form the most efficient and cost effective support system.

Cooperative Logistics. The process of negotiating, planning, coordinating and implementing logistic support between the civilian and military components of nations and international organizations. It incorporates member states' facilities, technologies, materiel and services, and aims to intermesh policies, programs, procedures and other applicable components of military and national support to produce an integrated logistic system between member states contributing to UN missions around the world.

2.2 Logistics Planning Considerations

Mission Analysis. Mission analysis defines the operational tasks to be performed and the resulting logistic requirements. Some tasks are specified by the mandate, while others are implied. For example, a specified task might be to disarm opposing factions. This is a clear task. The implied tasks, however, may include storage of and accountability for the weapons, destruction procedures, and re-issue procedures. If the mission analysis only notes the specified task, then the resources necessary to perform the implied tasks will be understated. Once the specified and implied tasks are identified, the logistic planner considers the tasks estimated in relation to the environment in which they are to be executed.

Logistic Planning Factors. They are a listing of relationships between two or more variables, e.g., kgs/man/day, which can be used to plan resource needs in detail. If they are not readily available, they should be developed and applied when planning a specific mission.

Determination of Logistic Requirements. This is accomplished by applying the logistic planning factors against the tasks outlined in the mission analysis. The gross logistic requirements can then be used by the planner to determine the most efficient and cost effective method of supply and distribution.

Sources of Logistic Support. The UN will normally obtain logistic support for field operations from four main sources: Member states; UN engaged contractor support (either local or international); UN owned assets; and/or Host nations.

Soliciting Member States for Logistic Contributions. Once logistic requirements are known, the UN will solicit member states that possess the required logistic capability to provide all or part of the logistic force necessary. The member states will then indicate what support forces can be made available.

Determination of Logistic Shortfalls. Once member state contributions are determined, the planner can assess whether any capability shortfalls exist. If identified shortfalls cannot be resolved through additional member solicitations or increased host nation or contractor support, the planner should recommend that the operational plan be changed to reflect these differences. Otherwise, the accomplishment of the mission may be in jeopardy.

2.3 Phases of Peacekeeping Operations

United Nations peacekeeping operations can be broken down into six distinct phases, each with their separate logistic support requirements. These phases are: **Standby; Warning; Mounting; Deployment; Sustainment; and Redeployment.**

Standby Phase. This begins when the Secretary-General (SG) determines that a particular situation may require UN involvement. Prior to formal notification of the General Assembly, a UN Fact Finding and Technical Survey Team is usually dispatched to the problem area to report on the political, diplomatic and military situation. At this stage a survey will be made of potential troop contributors and informal offers noted.

Warning Phase. This is initiated when Security Council approves a UN resolution calling for the creation of a peacekeeping mission. In considering this resolution the SG will make available rough order magnitude 'Cost Implications' based on an initial estimate of the Mission type and strength. At this point a full 'technical survey' will be dispatched including logistic representatives who can conduct a macro logistic reconnaissance to determine the availability of Host Nation Support (HNS), existing logistic infrastructure and possible general support contracting options. The results of that macro reconnaissance coupled with the proposed operational force structure required for the mission will provide the basis for the initial budget estimate required to support the SG recommendation to the General Assembly. A suggested structure and check list for such a reconnaissance is available in the UN Survey Handbook. Following this, the preliminary budget and manpower requirement estimates based upon the initial technical survey are approved. Prior to the actual mounting of the operation, a more complete budget must be developed, reviewed by the Advisory Committee on Administrative

and Budgetary Questions and approved by the General Assembly. Under UN financial rules, no funds can be expended until the budget is approved. The logistic planner must participate in the budget process and be prepared to offer alternatives in those instances where budget shortfalls exist. This requires constant refinement of the logistic planning factors. Troop contributing nations offers will be confirmed at this stage.

Mounting Phase. This begins with approval of the budget by the General Assembly. The Department of Peacekeeping Operations (DPKO) will be given overall responsibility for the technical and operational control of the mission, while its Office of Mission Support (OMS) will be responsible for budget execution, administrative and operational support.

Logistic planning must be further refined and formalized at this time. Participating states will be invited to perform logistic reconnaissance to refine national logistic requirements. DPKO will also prepare logistic and operational guidelines. The mounting phase will involve the following critical logistic actions:

- Determination of phased deployment schedules with priority given to Logistic units;
- Indicate a period of self-sufficiency for each contributing state contingent;
- Determination of air/sea lift requirements for contributing states;
- Securing air/sea lift from contributing states and/or UN commercial contracts;
- Establishment of theatre reception and movement control capabilities;
- Initiation of local and/or international contracts for logistic support; and
- Deployment of an advance command and control element.

Deployment Phase. This phase begins with the actual deployment of national contingents and UN personnel. OMS will coordinate all transportation into and from the theatre. Any movements arranged by the troop contributing state must be approved by OMS. Failure to do so may result in that state being reimbursed only that amount the UN would have otherwise paid had the UN arranged the move. Load lists and dangerous cargo details are to be forwarded to OMS as soon as possible, but no later than four weeks prior to deployment.

Sustainment Phase. Once contingents have deployed, it is necessary to provide the logistic resources to support them in the mission area. This is the sustainment phase, which begins when the UN normal processes are in place. The "normal processes" are a combination of all UN arranged sources of support.

A contingent rotation policy will be established by the UN based on the particular mission needs and environment. Rotation for units and personnel will be arranged by OMS, normally using chartered commercial aircraft after international bidding. It is the responsibility of the contingent's government to inform the UN as early as possible, but no later than three months prior to rotation, of the exact dates proposed and the number of personnel involved each way. The rotation should involve only personnel and personal equipment, including personal weapons, up to 45 kg per person. Unit equipment will usually not be rotated. Since a number of airlines will be requested to submit bids for the contract, a national airline of the troop contributing state can be expected to compete on equal footing with others. Any deviation from the rotation policy established by the UN for a particular mission must be approved in advance

by OMS. Failure to obtain this approval can result in non-payment of the expenses by the UN. Additionally, failure to provide the necessary information in a timely manner may result in delays of the requested rotation schedule.

Redeployment. Prior to the completion of the mandate, redeployment planning will be conducted in order to phase out the operation. This planning is usually done in greater detail than for the deployment phase.

The redeployment phase is conducted in three parts: stores drawdown planning, out clearance procedures and transportation planning.

Most support problems encountered in UN operations are the direct result of incomplete or superficial logistic planning. It is critical that all logistic planners, whether national or UN assigned, ensure that adequate mission analysis is performed along with logistic reconnaissance. Once a mission is approved, the logistic planning requirement intensifies and must be constantly managed until redeployment is completed.



UN troops unload spare parts and personnel equipment during a contingent deployment (UNHCR/A. Hollmann/01.1994).

2.4 Preparations

Military Units. This is the responsibility of the troop contributing country. Each designated unit should be fully equipped in accordance with national scales of issue for the geographic location of the mission. The Guidelines for Contributing Countries will contain specifications, where appropriate, for the military units required and shortfalls should be declared at this stage. Weapons and ammunition requirements will be determined on a case by case basis. Once UN food and water contracts have been established, each item will be re-supplied in accordance with the UN Ration Scale. This scale will be modified as necessary to be compatible with the contributing nation scales of issue and to cater for national food tastes and religious dietary customs. National ration scales are to be provided to OMS and the Chief Logistic Officer (CLO) as soon as possible.

Communications. Communications between Mission Headquarters and formed units may initially be provided by the Mission Military Signals Unit. Military units should be capable of providing their own internal communications for operations. Should a Government wish to have its own national radio link to its contingent, related costs will not be reimbursed by the UN.

Engineer Support. The engineering requirements of the force will be met by a combination of military engineer units, UN civilian staff support or civilian contract. Depending on the situation, military units may be asked to deploy with a capability for self-help in the development of their respective areas of responsibility.

Medical Support. Military units are to deploy capable to provide Level 1 support and if necessary Level 2 support (dependent on size of force and geographical distance to other force medical capabilities and availability of CASEVAC/MEDEVAC). Level 3 capabilities will be provided by designated Force Theatre Field Hospital(s) and may or may not be directly associated with a contributing force contingent army. Casualties or illnesses that exceed the capabilities of the Force Medical facilities will be evaluated for Medical Evacuation or repatriation. If a contributing state determines not to use the UN provided medical system, or recommended out of mission area contracted medical facilities, it must meet all of the related transportation, accommodation and medical care costs.

Air Support. Air support to the Force will be provided by a composite Air Unit or in conjunction with civilian contracts under OMS arrangements. In some circumstances, particularly during adverse seasonal conditions, units in the field may need to be re-supplied by air. However, this will be the exception and air support cannot be guaranteed in all cases. Air support for deployment, or redeployment, will be a matter for special arrangements between the contributing state and the OMS.

Transport. The aim will be to provide a Second Line transport capability and in large Missions a Third Line, as part of the logistic organization. However, all contingents are to deploy with sufficient integral transport resources including materiel handling equipment to meet their own internal needs.

Postal Services. Contributing states are responsible for their own contingent postal requirements. The UN will provide for members of the Force the free dispatch to the home country of a limited number of air letter forms. Contingents may avail themselves of this service once an agreement has been concluded between the member state and the UN.

Accommodation. Space allocated for working as well as for the living accommodation are listed in the Operational Support Manual. Planning for and implementation of field accommodations shall be in accordance with the Standard Specifications issued for Infrastructure and Accommodation by UN OMS and the guidelines issued to troop contributing countries for any particular mission. Given the long lead time required to procure, deploy and install prefabricated accommodation, troop contributing countries will normally be requested to deploy along with tents, related infrastructure and equipment for an initial period of 60 days which can be extended up to a period of six months. The tented accommodation will be upgraded by the United Nations as outlined in the Guidelines and the Standard Specifications, referred to above. Where infrastructure is available, the United Nations can rent buildings for offices, warehouses, workshops and living quarters in line with the UN approved Standard Scales, mentioned above.

Maintenance. Units are to deploy with integral First Line and, where appropriate, Second Line repair and recovery support. Where applicable dependent on the size of the Mission, a Second and Third Line maintenance organization may be available or such support may be made available contractually. Units are to deploy with sufficient fast moving repair parts to be self supporting until such time that the Military Component Maintenance Unit has been established.

Vehicles. Contributing states must ensure that all their vehicles and trailers are painted white with appropriate UN markings prior to deployment. The letters "UN" are to be painted in black on each side of the vehicle, on top, on front and on rear. Appropriate tow bars, tow cables and other accessories should accompany all vehicles.

Personnel. In preparing personnel for deployment as part of a UN mission, contributing states are responsible for the following:

- **Training.** As a minimum, pre-deployment training is to be conducted in weapons, rules of engagement, area or country orientation, the mandate, organization of the mission and medical and health. It should include specialist tactical training applicable to the theatre and type of operation, and refresher training on all equipment to be used.
- **Medical.** The UN Medical standards have to be followed when examining personnel for deployment to peacekeeping missions. All those found medically fit are to be fully immunized against endemic diseases, as recommended by the UN Medical Service.
- **National Pay and Allowances.** Contingents are to ensure all necessary arrangements are made for payment of national pay and allowances. The UN will not be responsible.
- **Identification.** While in transit to and from the mission area, contingent personnel are to be in possession of identification in accordance with their national regulations. The UN will provide accoutrements such as badges, berets and shoulder patches.

Coordinating Conference. A coordinating conference will be held at the UN Headquarters in New York prior to the deployment phase. Each contributing state will send appropriate representatives to this meeting to finalize planning and administrative details. Costs of travel to and from this conference will be met by the UN. Additionally, contingents that wish to perform a reconnaissance of the area of operations must obtain prior approval from OMS. Costs associated with this reconnaissance will be borne by the government of the contributing country.

2.5 Verification

Arrival Inspection. As part of the verification and control of the Contingent Owned Equipment Agreement, an initial inspection is made when the unit arrives in theatre. Deployment planning must account for this inspection. The time required for inspection will differ with each mission.

This inspection ensures that the contingent is equipped with the quantity and capability as provided for in the Contribution Agreement. It also identifies additional equipment above the agreed levels that may be subject to support reimbursement.

Operational Inspections. The Operational Inspection is designed to ensure that a contingent is meeting the service level agreements governing the Contribution Agreement. The inspection covers both equipment and services and should occur at least every six months. Reimbursement to Contributing nations will be based on the outcome of this inspection.

Departure Inspection. The Departure Inspection is designed to ensure that the contingents leave the mission area with the equipment and personnel it brought and to establish a closure date for reimbursement.

LESSON 2
END-OF-LESSON QUIZ

1. Who is usually responsible for support to a contingent during the first 60-90 days of a mission?
 - a. The FLSG
 - b. the contingent's Member State
 - c. the Force Commander
 - d. the CAO
 - e. none of the above

2. Which of the following defines "Integrated Logistics Support"?
 - a. The process of negotiating, planning, coordinating and implementing logistic support between the civilian and military components of nations and international organizations.
 - b. The process by which all available materiel, administrative and sustainment systems are combined to form the most efficient and cost effective support system.
 - c. The gross logistics requirements that can then be used by the planner to determine the most efficient and cost effective method of supply and distribution.
 - d. The self-sufficiency of member states in respect to elements of re-supply, particularly technical spares, national clothing and replacement national equipment.
 - e. none of the above

3. In the planning process for a mission the logistics planning factors are applied against the tasks in the mission analysis to produce which of the following:
 - a. the sources of logistics support
 - b. the logistics shortfalls
 - c. the logistics capability to be solicited from member states
 - d. the determination of logistics requirements
 - e. all of the above

4. Which of the following is not a UN peacekeeping operational phase?
 - a. Standby
 - b. Warning
 - c. Rotation
 - d. Mounting
 - e. Sustainment

5. The phases of a UN operation are initiated by certain events. Match the following phase to their events.
- | | |
|-----------------|--|
| a. Standby | 1. UN normal support processes are in place. |
| b. Warning | 2. The approach of the end of the mandate. |
| c. Mounting | 3. SG assessment of situation. |
| d. Deployment | 4. Security Council approves resolution to create a mission. |
| e. Sustainment | 5. The General Assembly approves the mission budget. |
| f. Redeployment | 6. UN personnel move to the mission area. |
6. What document should be used to determine how military units should be fully equipped?
- a. UN scales of issue for the geographic location
 - b. National scales of issue for the geographic location
 - c. Guidelines to Troop Contributing Countries
 - d. Mission Logistics Directives
 - e. none of the above
7. The verification of Contingent Owned Equipment (COE) arriving in the mission is completed through which of the following activities?
- a. In-survey
 - b. Operational inspection
 - c. Property Board survey
 - d. Arrival inspection
 - e. all of the above
8. When and where is the logistics coordination conference held?
- a. in the member state prior to the deployment phase
 - b. in the mission area prior to the deployment phase
 - c. at UN headquarters prior to the deployment phase
 - d. in the mission area after the reconnaissance mission
 - e. none of the above
9. In preparing their personnel for deployment, contributing states are responsible for which of the following:
- a. medical
 - b. identification
 - c. national pay and allowances
 - d. training
 - e. all of the above
10. When are vehicles painted white and the UN black letters applied.
- a. Prior to deployment
 - b. during deployment
 - c. at a UN facility in the mission area
 - d. at a UN facility outside of the mission area
 - e. none of the above

LESSON 2

ANSWER KEY

1. b. the contingent's Member State
 2. b. The process by which all available materiel, administrative and sustainment systems are combined to form the most effective and cost effective support system.
 3. d. the determination of logistics requirements.
 4. c. Rotation
 5. a. Standby - 3. SG assessment of the situation
b. Warning - 4. Security Council approves resolution to create mission
c. Mounting - 5. The General Assembly approves the mission budget
d. Deployment - 6. UN personnel move to the mission area
e. Sustainment - 1. UN normal support process are in place
 6. b. National scales of issue for the geographic location
 7. d. Arrival inspection
 8. c. at UN Headquarters prior to the deployment phase
 9. e. all of the above
 10. a. prior to deployment



LESSON 3

SUPPLY

- 3.1 Introduction
- 3.2 Supply Concepts
- 3.3 Supply Planning
- 3.4 Supply Operations
- 3.5 Food Services
- 3.6 Ammunition and Explosives
- 3.7 Petroleum, Oils and Lubricants

LESSON OBJECTIVES

This lesson will familiarize the student with the United Nations supply system. Topics will include supply concepts and planning, materiel acquisition, accounting, demand procedures, warehousing and storage, disposals and food services. The lesson will conclude with examples of how some of the most common commodities, like food, fuel, water, ammunition and spare parts are handled in the United Nations supply system.

By the end of Lesson 3, the student should be able to meet the following objectives:

- Define the UN supply system;
- Provide guidelines for supply planning;
- Describe the common UN supply operations; and
- Detail the UN supply procedures.

3.1 Introduction

The objective of Supply is to provide the right materiel, in the right quantity, to the right place, at the right time and in the most economical manner. **Materiel** is a generic term covering equipment, stores, supplies and spares. The detailed attention required for ammunition and fuel is provided as examples of the intricacies of UN supply operations.

3.2 Supply Concepts

General. The United Nations is responsible for the provision of supplies to its missions and the forces under its control. Wherever possible the standard UN supply system is used and the requirements of the mission are met through the procedures established by the UN Headquarters through the OMS. The UN will strive to use the most cost effective supply sources while ensuring the most efficient materiel support to the mission.

UN missions vary in size from small groups of observers, who may be civilian, police, military or a mixture, to a large force operating a full spectrum of military equipment. The UN supply system is tailored for a specific mission; however, a general concept for supply is common to all operations. The concept uses an established structure, a series of supply functions, and an overall command and control framework based on the requirements and constraints of the mission.

UN Supply Structure. The supply structure for UN missions is based around three distinct levels of support. These levels are defined as follows:

- **First Line (organizational support)** - those stock holdings intrinsic to a unit and normally deployed with it; that is, the stocks required to make a unit self-sufficient for a stated period;
- **Second Line (direct support)** - the stocks held, or obtained within the mission area, to replenish First Line holdings as they are consumed. Normally held by a UN logistics base or national logistics unit in the mission area. Each participating member state may have a National Support Element (NSE) incorporated into the Force Logistics Support Group (FLSG); and
- **Third Line (general support)** - those stocks procured outside to the mission area. They may or may not be centrally warehoused in the mission area.

Small missions may combine First and Second Line supply. Any mission, in which units are deployed from more than one country or have multiple task groups, will normally establish a Force Logistic Support Group (FLSG) to provide common Second Line support to different contingents.

Figure 3-1 depicts the UN supply structure. For large missions, the mission logistics base may provide both second and third line supply support if it is responsible for providing general warehousing in the mission area. Host Nation suppliers may also be used to provide third line support functions for the Mission.

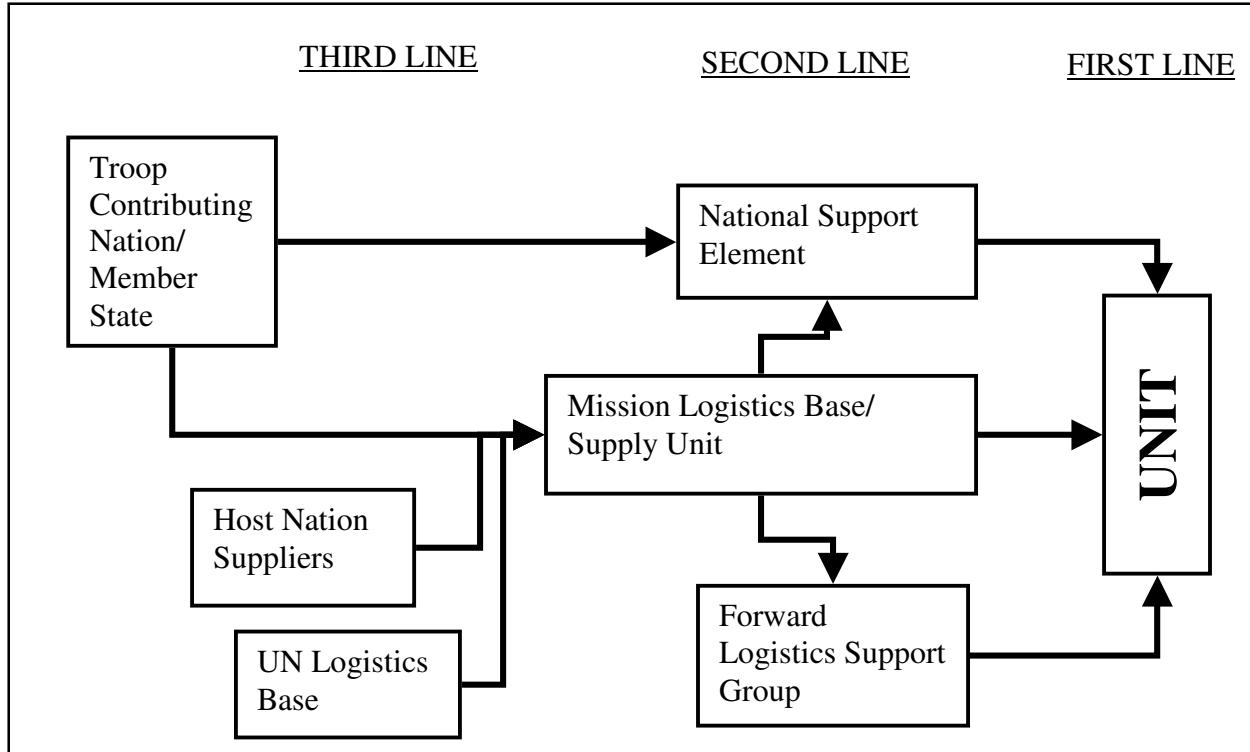


Figure 3-1

UN Supply Functions. They are as follows:

- **Supply Planning.** Identifying the requirement and determining the range and quantity of items required to support a unit and its equipment. Its phases include the identification of items of supply, cataloguing, scaling and the issue of procedures as required;
- **Acquisition of Materiel.** The process of obtaining materiel and services from military or commercial sources of supply;
- **Receipt and Issue of Materiel.** The process of acceptance and verification of delivery of materiel from supply sources and the subsequent re-allocation to meet the requirements of the units;
- **Care and Storage of Materiel.** The process of warehousing, conditioning, inspecting and packaging stocks for future use;
- **Disposal.** The removal of materiel from the supply system through sale, demolition or destruction; and
- **Inventory Control.** The control of materiel by establishing materiel accounting and management methods and procedures. This includes maintaining stocks at the required level.

Command and Control. The command and control of supply in the Mission area is exercised by the Force Commander, military and civilian staffs, and subordinate Unit Commanders, under the authority of the Head of Mission. The control of supply and replenishment is combined with the logistic staff structure that will have a number of branch section chiefs, e.g., signals, medical, transport, procurement, etc., who designate the demand and issue controls on the commodities of their branch. The structure of the command and control systems must:

- be responsive to the planning and operational requirements of the mission;
- be flexible enough to meet the possibility of the materiel requirements for missions of all kinds;
- be capable of using or developing common supply procedures, forms and returns for requisitioning and inventory control;
- maintain asset visibility so that staffs can provide effective control, distribution of stocks and use of transport resources;
- be adaptable so that ADP techniques and resources can be used;
- be aware of the areas of interoperability and standardization of materiel resources; and
- be capable of integrating national systems where possible.

In general, every demand is to be initially placed upon the UN supply system. Each level of the supply system has some form of materiel control. The lowest level of control is established in the contingent in which the Unit Commander or his delegate will approve the requirement. Each participating member state will maintain its own materiel control techniques in accordance with its established procedures. The highest level of control is at the mission headquarters level.

Some participating member states and their NSE may invoke a control system in which their units will not submit any demands to the UN system without approval from their NSE.

3.3 Supply Planning

Logistic Staff Planning. In the HQ of a mission, two officials and their staffs have overall responsibility for the activities of the supply functions in the mission; CAO and CLO. Their general duties and those of their staff are detailed in Lesson 1. The success of supply operations will depend largely on the cooperation between these officials and their respective staff.

In Lesson 1, the various sections responsible to the CAO were described. However, there is generally no specific supply section under the CAO and the functions are spread among several agencies. The General Services Officer handles the inventory control through the Property Control Unit, Receipt and Issue is usually under the Chief Procurement Officer while other supply functions are split among the functional Chiefs of Engineering, Transport, Communications, etc.

In the military component, the Mission Senior Staff Officer Supply (SSO Sup) is responsible to the CLO for all supply related matters, including supply policy, plans, operations and coordination within the military component of the mission. Specifically, he will:

- prepare requisitions for supplies and services and forward them to the CAO and Section Chiefs;
- receive all unit demands and redirect them to the appropriate branch or unit/element;
- monitor unit demands (contingents and units of the FLSG), review entitlements, issue procedures and assign demand priorities;
- establish the policy for the care and storage of equipment and supplies;
- monitor the inventory control system of the FLSG, stock control levels, and supply planning factors and advise the CAO of any required changes;
- assist in the hand-over procedures;
- receive and monitor the contingent inventory lists of Contingent Owned and UN owned equipment;
- establish procedures to maintain the property records (supply accounts); and
- establish and manage a supply operations cell if required.

Should the Mission be large enough that the support structure of the military component requires large independent or specific supply units within the FLSG, the Commanding Officer of the Supply Battalion or Mission Supply Depot will be responsible to the CLO for the efficient management and operation of the facilities and the mission commodities within them. Specifically, these supply unit Commanding Officers will be responsible for: receiving, inspecting, storing, securing, maintaining the property records and issuing the Mission equipment and supplies.

General Guidelines. Initial planning must address a broad range of factors, strike an effective balance in capabilities to meet changing requirements, and retain flexibility. Planners clearly understand the operational objective and concept of operation so they can develop a concept of supply support. The multinational nature of UN missions introduces additional complexity to the planning process. Thus, the supply planner should take into account:

- Supply capabilities of participating countries' forces should be identified early as well as host nation resources, sources of supply, and the most effective system of supply should be identified;
- To the extent possible, participating countries' capabilities, host nation support, contracted services, and UN resources should be integrated;
- The condition, congestion, distance, and security of sea, air and ground lines of communication impact directly on supply plans and may dictate a combination of distribution methods that increase the complexity of the logistics mission as a whole;
- Mission areas may lack the infrastructure, such as electrical power, transportation networks, port facilities, required to provide supply support. Planning must recognize these shortfalls and find ways to overcome them; and
- The types and quantities of commodities required for the mission must take account of geographical conditions and cultural diversities.

At the Second Line of support, the CLO's supply planning staff determines stocks to be held. The Second Line stock scale includes items that experience or projected need indicated, consistent with available funding. Determining Second Line stocks is a planning process that addresses the operational and logistical aspects of a mission, approved budget, First and Second Line unit capabilities, distribution between National and UN stocks and availability of supplies.

The absence of a cataloguing and coding system common to all member states means establishing the range of stocked materiel requires contributing countries to clearly identify requirements in a manner that enables the supplying unit to obtain the correct item. This is particularly true when the item required is critical, for example, repair parts and lubricants that affect the performance of a weapon or communication system.

Supply planning factors for some items, such as rations, can be expressed in kilograms/pounds and litres/gallons required per day based on troop strength. Some items, such as repair parts, require a history of demand or usage to determine the desired stock range and quantity which may need to be adjusted to meet operational intensity, climatic and cultural factors.

The stock level is based on a time period determined by the CLO. Replenishment of consumable supplies is based on a standard formula that considers stock balance, average monthly demands and procurement lead time. Replenishment of non-consumable major end user items is a national responsibility.

Initial Provisioning. In the absence of UN consumption data or demand history, initial provisioning levels will be established by the CLO/FLSG staff officers in coordination with the Supply Officers of the supported First Line units. These recommendations can be based on either the comparison or calculation methods.

- **Comparison** - Demand and consumption data is taken from a past mission with similar characteristics, such as troop strengths, equipment, duration, and climatic conditions, and mandate.
- **Calculation** - Automated or manual calculations use standard planning factors for troop strengths, equipment densities, anticipated operating intensities, and duration. Such calculations may be made by the mission or provided by a member state that has support experience for a particular type of supply commodity or equipment.

During the mission standby phase, a recommended initial stock scaling and projected consumption for deploying contingents shall be forwarded to the OMS to support the budget process. Minimum information required will be spelled out in the Aide Memoire issued by the OMS to the troop-contributing governments.

Procurement to fill initial scaling may be from the existing UN stock held elsewhere, through Letters of Assist from member states, from host nation government sources, local contractors or other sources.

Replenishment. When manual systems are used, Second Line stocks will be replenished when the stock level reaches the reorder point (ROP), thereby ensuring that stocks do not fall below the reserve level (RL). When Second Line stock levels reach the ROP, the item accounting unit prepares a replenishment worksheet and forwards it through the SSO Sup to the CLO for consideration.

3.4 Supply Operations

Materiel Acquisition Procedures. All procurement activities, such as contracts for purchase, rental of services, supplies, equipment or other requirements, entered into by the United Nations are governed by UN Financial Regulations and Rules. The procurement policies and procedures for the purchase, receipt, management and disposal of equipment are contained in the UN Procurement Manual. The Mission procures either through UNNY or locally. These regulations are further explained in Chapter 14 of the UN Field Administration Manual.

Procurement can be entered into on behalf of the United Nations only by officials duly authorized. This includes entering into contracts, the invitation of proposals or tenders and the negotiation with potential suppliers or purchasers on the basis of detailed specifications. The duly authorized individuals in the Mission are the Chief Administrative Officer (CAO) or Head of Mission. A Mission Committee on Contracts is formed to assist the CAO.

The member state's contingent participating in a mission is not allowed to procure in the name of the UN unless delegated authority has been given or a "Note Verbale" is agreed upon by HQ UNNY and the respective government. If a contingent enters into procurement activities without prior approval from HQ UNNY, the Mission is not liable to the member state or contract source for the terms made by that contingent.

Types of Acquisitions. The types of acquisition activity available to the Mission through the authority of the CAO and Head of Mission are:

- process a local Purchase Order that is within financial limits against an authorized local vendor;
- process a Direct Provisioning document (Blanket Purchase Order on an Open-ended Contract) which is a requisition against an existing approved local or pre-approved Contract;
- raise a local Contract for supplies or services that is within the mission's financial limitations and procurement area;
- generate an Accelerated Procurement device in which local funds are used to buy an urgent requirement off-the-shelf;
- when over the Mission financial limits, a draft Requisition is raised, approved and sent to HQ UNNY to process; and
- request a Letter of Assist (LOA) through HQ UNNY. This is a contracting document that is entered with a member state's military or government as a source of supply to satisfy the original demand.

The type and method of procurement chosen will depend on the mission budget, financial limitations, sources of supply and urgency. Guidance in choosing the method of acquisition is contained in the Procurement Regulations and Rules of the United Nations and Chapter 14 of the UN Field Administration Manual.

Procedure. The contingent submits a demand for supplies or services to the SSO Sup in the HQ FLSG who registers it, verifies the signing authority and substantiation and forwards it on to the Mission Procurement Section.

The Mission Procurement Section ensures that the FLSG Supply Unit Requisitioning Officer is authorized to raise such a demand, verifies the requisitioned items are budgeted for, and opens a file in the Procurement Registry Unit. The demand is then assigned to the appropriate Procurement Section Commodity Unit.

The Procurement Section staff reviews the market sources; if required, invites tenders for bids, or prepares the international requisitioning documentation. If the demand exceeds the CAO's financial limits, the Procurement Section prepares the substantiation and requests advice from the Local Committee on Contracts. The requisition is then forwarded to UNNY OMS.

Treatment of taxes on UN procurement will be in accordance with the Procurement Manual. Generally, the UN is exempt customs or excise taxes.

Receipt of Materiel. Receipt of materiel into the Mission area, is completed by the Mission Receipts and Inspection Unit (R & I) using procedures in Chapter 14 of the UN Field Administration Manual.

The Contingent must advise CAO Property Records of the materiel. The SSO Sup is notified in order to close-off the acquisition register.

NSE Procurement. Should the member state's contingent obtain materiel through their National Support Element (NSE), their national rules and regulations apply. The SSO Sup, CPO, and NSEs are to coordinate any common requirements so that there is fair competition for local or limited resources.

Financial Limitations. The procurement financial limitations vary from mission to mission based on the overall mission budget. Each mission will be given its authorized financial limit and signing authority by HQ UNNY through the CAO, for expendables, non-expendable items, and service contracts.

Mission Budget Concern. The FLSG is allocated a budget from the CAO for the procurement activities based on unit demands. The mission Procurement Section only keeps track of the expenditures against the total mission budget allocation. Therefore, the FLSG and the SSO Sup must monitor the actual expenditures against unit allocations as the demands are being submitted to the Procurement Section. The SSO Sup must notify the CLO of the mission's military component budget status on a monthly basis.

Delegation of Signing Authorities. The CAO may be given authority by HQ UNNY to further delegate signing authority and limits to certain mission officers who are knowledgeable of the UN regulations, rules and procedures. The CAO must publish and maintain a list of such delegations.

Accounting Procedures

General. Designated Self-accounting units are responsible for the accurate accounting for all UN and Contingent owned stores, equipment and vehicles issued to them. These units are also authorized to submit demands for materiel and services to Second Line supply facilities within the mission area. When both UN and Contingent owned property are held by a unit, separate accounts will be maintained for each category of property. Units must provide the necessary staff for efficient stores accounting within their units. Accounts will be inspected periodically by the CAO's Property Control Unit.

Supply Unit Accounting Procedures. The Supply Unit is responsible for the accounting of all UN Owned Equipment and stores entering the mission area except:

- Force medical stores: accounted for by the Chief Medical Officer (CMedO);
- Civilian vehicles and spare parts for civilian pattern vehicles: accounted for by the Chief Transport Officer (CTO);
- Communications stores and equipment: accounted for by the Chief Communications Officer (CCO);
- Observation and surveillance equipment: accounted for by the Staff Officer Maintenance (SO Maint); and
- Mission welfare stores: accounted for by the Chief Welfare Officer (CWO).

Accounting Property. The two categories of UN owned property are:

- **Expendable Property.** Property with an original purchase cost of less than US\$1,500.00, or an original purchase cost of US\$1,500.00 or higher but with a serviceable life of less than 5 years, **except** "special" items. "Special" items are property "of an attractive nature" and having a minimum value of US\$500.00, such as cameras, television sets, binoculars. Property controls need not be maintained for expendable items other than those defined as "special."
- **Non-Expendable Property.** Property valued at US\$1,500.00 or more per unit at the time of purchase and with a serviceable life of 5 years or more. Property records and controls must be maintained for these items.

Second Line. All equipment and stores will be received by the Receipt and Issue Group (R & I Group) collocated with the Supply Unit. After completion of Receipt and Inspection procedures, the equipment and stores will be brought on charge by the Accounting Unit by posting to the appropriate Stock Record Card.

All subsequent transactions will be entered on the Stock Record Card. For spare parts accounting the Work Order will be used as the authority for issue.

OIC Supply Unit is responsible for proper accounting procedures, including tracking of stock levels, dues in, dues out and recording of serial numbered equipment. Second line accounting will normally use the national Supply Unit procedures, appropriately adapted to interface with UN asset accounting requirements and procedures.

Unit Accounting Procedure. The Unit supply staff (QM) is responsible to the Unit Commander for proper accounting of all UN and Contingent owned stores, equipment and vehicles. The QM staff will demand all unit requirements, other than Medical Stores, from the Supply Unit.

The unit to sub-unit accounting procedures adopted by the Unit QM staff must ensure accurate unit stores accounting and enable the QM to control the movement of accountable stores within unit. The issue of stores to individuals will be made using a temporary loan register or other national form which provides similar detail. The issue of stores by company QM staff may be made using the "article-in-use" ledger or other national form which provides similar details.

Inventory Management

Write-off of UN Materiel. The following paragraphs detail the procedure to be followed by a unit to write-off UN owned materiel that has been stolen, hijacked, burnt, lost or become unserviceable due to normal fair wear and tear or other reasons.

All Commanding Officers are financially responsible to the UN for all materiel held by their unit. When a loss occurs for whatever reason or damage done to materiel which makes it unusable, the Unit must initiate write-off procedure so that the materiel can be taken off the ledgers of the Unit and replacements received. Examples of when write-off action should take place are found in the Operational Support Manual or the specific Mission Logistics Directives.

Authority for Write-off. (based on current OSM values as of 1995)

- The Mission CAO has the authority to write-off items up to a value of US\$1,500.00.
- The Mission Property Survey Board (PSB) has authority to write-off an item or items up to a value of US\$25,000.00 per case. Other cases over US\$25,000.00 in value will be referred (by the PSB) to UNHQ New York for final approval. Vehicles can be written off by the Mission PSB regardless of purchase cost.
- The Unit must start the write-off procedure and forward the necessary paperwork to Log Ops. The CLO will authorize the temporary write-off which will allow the Unit to request replacement items for those written off. The CLO will in turn submit the write-off Vouchers to the secretary of the PSB for further action. When final authority has been given for the write-off, the PSB secretary will advise CLO who will in turn advise the Unit.

The Three Different Types of Write-off.

- Non-technical expendable items unserviceable due to normal fair wear and tear. Examples: Beds, mattresses, wardrobes, bed linen, cutlery, chairs, hand tools, etc.
- Technical items unserviceable due to normal wear and tear. Examples: Binoculars, heaters, televisions, radios, refrigerators, cameras, etc.
- Technical and non-technical items that have been stolen, burnt, hijacked, shelled or damaged by natural causes such as storms and flooding.

Write-off of Contingent Materiel. Write-offs for Contingent-owned materiel and equipment are covered under the COE Agreement signed with the UN prior to deployment to the mission area. In most instances, the UN is responsible for reimbursement for write-offs over US\$250,000. Write-offs under that threshold are covered in the monthly payments made to Member States. However, any loss or damage resulting in a write-off should be documented in accordance with mission logistics directives to provide a trail for any future discussions.

Demand Procedure

Preparation of Demands. Self-accounting units will prepare demands on specified UN Log Forms that are available from Mission Headquarters. Details for completion are provided in the Mission Logistics Directives. Routine needs for general equipment and stores will be submitted to the CLO Supply Unit. Demands for special equipment and stores are to be submitted to the appropriate Supply Staff Officer.

Staffing Process. The CLO's Supply Unit will register and scrutinize the demand as to correctness of information provided by demanding unit, and indicate the available stock. The demands, except those issued under automatic distribution by the Supply Unit in accordance with a scale of issue, will be passed to Log Ops for authorization or rejection.

The demand will be reviewed and the unit advised of its status. Demands may receive partial acceptance because of a reduction of amount demanded due to limited stocks, cancellation due to no stock or automatic issue when stocks are available, or rejection due to non-entitlement of requisitioned item.

Transport. Units must provide unit transport for collection of items from the Supply Unit. The Transport Unit, upon request through HQ Logistics Operations, may provide Second Line transport support.

Immediate Operational Requirement (IOR). Immediate Operational Requirement demands are processed in a similar manner to Routine Demands, except that the IOR procedure ensures that the highest priority is attached to their issue or procurement as applicable. This demand system may be used for mission critical requirements only, e.g., to ensure uninterrupted performance of an assigned operational mission or task or other vital functions, such as fire fighting, communications, ambulance or the like.

Automatic Distribution. Some consumable items of limited stock may be subject to automatic distribution according to scale of issue and on the basis of "fair share." Such distribution is originated by Log Ops or Specialist Supply Units. Consumable items such as cleaning and hygienic materials and stationery are issued according to a fixed scale of issue and are distributed or ready for collection at the start of each month. Some form of rationing may be used if availability is limited.

Receipt of Equipment and Supplies

General. It is essential that proper receipt and inspection documents be raised immediately on receipt of equipment and supplies consigned to the United Nations. These are required for the prompt payment of invoices or together with other documents for claims action against vendor or carrier.

The R & I Group is collocated with the Supply Unit and is the focal point for the delivery of all incoming shipments. The R & I Unit is responsible for:

- Identifying the shipment and the Self Accounting Unit which placed the demand;
- Maintaining a register of all items delivered; and
- Notifying the Self Accounting Unit concerned of items that have arrived. The Self Accounting Unit will make arrangements for collection and the items will be handed over against signature only.

The R & I Group is responsible for follow-up with the Movement Control, the Transport Group and Self Accounting Units so that all Receiving and Inspection Reports or Discrepancy Reports are raised and submitted to the R & I Group for control and distribution of the various copies of the report. The R & I Group is also responsible for processing claims against vendors or carriers to UN Headquarters New York.

Special Self Accounting Units, like an FLSG, are responsible for:

- Raising the Receipt and Inspection Reports (and Discrepancy Reports) for all items received;
- Verifying items against the procurement document to ensure that specifications have been met regarding quality, quantity, delivery date and any other special instruction given to the vendor; and
- Preparing the R & I Report and forwarding it to the R & I Group for control and distribution.

Care and Storage

General. The sites, warehouses and depots also may be very different depending on the type of mission.

Warehousing. Warehousing means receipt, sorting, identification, inspection, preservation, shelving, safekeeping, retrieval for issue and preparation for shipment of materiel. Warehouses are often divided in separate sections as a multi-role supply point. Single warehouses for bulk supplies are also possible. Maximum use must be made of indoor and outdoor space, manpower, handling equipment and storage aids.

A proper location system should be used, and materiel stored in a manner that permits good selection and consolidation for shipment. Special attention should be provided for protection against pilferage.

Hazardous Materiel

General. Any materiel, which because of its properties is flammable, corrosive, an oxidizing agent, explosive, toxic or radioactive belongs to the class of hazardous materiel. Hazardous materiel must be handled carefully. Storage locations for hazardous materiel are based on the concept of compatibility; that is, if two chemicals or items will or may react dangerously if mixed, they are not to be stored together.

Classification of Hazardous Materiel. The method of segregating hazardous materiel by the risk present. As the classification system of hazardous materiel may differ in the laws of contributing countries, extreme care must be used in order to avoid confusion. The UN supply system uses a classification of 1 to 9. Each unit involved in receipt, storage, issue and disposal of hazardous materiel must identify the classification and manage the materiel in accordance with its national law and UN guidelines.

Since many hazardous materials have a high flammability, fire prevention and safety are extremely important when storing hazardous materiel. Therefore, smoking and other flame producing or sparking activities are forbidden and explosion proof lighting and electrical connections are to be used in areas of flammable or oxidizing materials. The area must also contain Personal Protective Clothing and Equipment, fire extinguishers, fire hoses, sprinklers and, if possible, heat and smoke detectors.

Since the other common problem with hazardous materiel is toxic fumes, proper ventilation is required. This not only removes or reduces any toxic fumes, it can also prevent the build-up of flammable fumes that may explode or spontaneously combust. All storage facilities must have the ability to prevent materials, mainly liquids, from escaping into the environment during a spill.

Packaging and Preservation. Packaging is defined as the method of unit protection and application or use of appropriate wrappings cushioning interior containers and identification. Packaging should ensure that all materiel is protected from deterioration, physical and mechanical damage, and remain in serviceable condition from time of acquisition until use.

In the UN, the supply system materiel often has to go long distances through three lines of supply. The supply roads into the mission area between Second and First Line units can be extremely rough. Therefore packaging is important.

The packaging policy on procurement of materiel is to accept commercial packaging whenever possible. Supply operations between Second and First Line units can recommend military packaging for complex cargo or accounts other than the commercial package provides. In every case, the supply unit in the area which the shipment takes place is responsible for the efficient packaging and the fulfilling of all military and civilian transportation and safety requirements. The transportation unit is responsible to control and maintain all packaging, according to current regulations.

Disposal of Equipment and Stores

General. The Supply Unit will control the storage and disposal of Mission Property which has been properly condemned.

In the case of contingents and other self accounting units, unserviceable items will be transferred to the Supply Unit only after final authority for write-off has been received from the Mission Property Survey Board. Items which have been condemned but are awaiting final authority for write-off will not be so transferred or accepted into the Supply Unit disposal park. These items will be stored separately until final authority for disposal has been received.

Surplus equipment and stores will be reported as excess stock and returned to the Supply Unit for storage or redistribution. In cases where, because of the size of an item or for reasons of safety or health, it is impossible or impractical to return it, Commanders of Contingents and other self accounting units will safeguard the equipment and stores and report it to the Supply Unit for its disposal in location.

Every precaution will be taken to ensure that property belonging to the government or citizens of the Mission Area is not included in any category of materiel reported for disposal by sale, demolition or destruction by other means.

In the event of a UN position being closed down, efforts must be made by the unit to obliterate all reference to UN, such as signs and markings at the position. Unit Commanders must make special efforts to bring to the attention of all personnel the possible consequences of the careless disposal of equipment and clothing with UN markings.

Categories of Disposal. The disposal of equipment and stores will normally fall into one of the following categories:

- the sale of scrap, surplus or condemned materiel and vehicles;
- the destruction of security stores, communications equipment, weapons, armourer's tools and related components and spare parts, or items having no sale value; and
- the demolition of ammunition and explosives.

Some items may not be sold and must be disposed solely by demolition or destruction by other means. Such items would be:

- UN Clothing, flags and decals;
- Ammunition and explosives;
- Communications equipment, weapons, armourer's tools and related components and spare parts – cut up, break, and sell as scrap; and
- Hazardous materials, those by virtue of its properties are toxic, corrosive or radioactive.

Condemned items of operational equipment will not be disposed of in their whole state. Military vehicles will be rendered unusable and disposed of in a similar fashion. Whenever a doubt exists as to whether or not an item falls into this category, the matter shall be referred to the Chief Logistics Officer (CLO) who will obtain a specific ruling from the appropriate authorities.

Deep sea dumping or burial of ammunition or explosives, or hazardous materiel shall not be carried out nor will there be any tentative arrangements or inquiries made with local authorities without prior approval from UN Headquarters New York.

3.5 Food Services

General. The CPO is responsible to the CAO for the contracting of food services for all components of the peacekeeping force and mission.

Self Sufficiency. Peacekeeping forces are to be self sufficient in food and ration items for a period of 60 days from their deployment. This period may vary depending upon the size of the contingent, location, proximity to the sources of supply. Nevertheless, early advice in this regard must be given to the contributing member states to allow sufficient time for them to complete food service arrangements. Payments for the food and ration items that the respective contingent had brought with them will be made by the UN to the contributing nation.

The Force self sufficiency period will enable UN personnel to identify sources of supply and systems of provisioning of the food services both close to or away from the deployment areas. Once established, the UN personnel should start meeting the requirements of food services of the force keeping in view their national food tastes and religious dietary customs according to the accepted UN ration scale.



A Canadian cook peels potatoes in preparation for supper at UNDOF's Camp Ziouani in the Golan Heights (2002). (Canadian Forces Photo #IS2002-2756a)

Sources Available for Food Services. Under normal circumstances four of the under mentioned sources of supply would always be available to the UN personnel. A good combination of these sources by the UN personnel would enable them to ensure smooth and

uninterrupted flow of food services to the force in the deployment areas according to their national food tastes and religious dietary customs. The sources available are:

- **Host Country.** All efforts should be made to purchase or hire the food services from the host country. This arrangement will not only help the UN in speedy procurement and provisioning of food services to the force but may be more economical compared with the other sources. Host Country supply may be useful for small missions and sometimes for medium sized missions due to their limited requirements.
- **Contributing Member States.** For a large contingent, it may not be possible for the UN to meet requirements of food services from the host country alone due to different national food tastes, religious dietary customs, and quantities. Hence, the food items and facilities may be purchased or hired from the respective contributing member states.
- **Contractors.** The UN can also purchase or hire the services of food service contractors. The contractor support can be arranged by the UN locally or internationally either for complete food services or only for those items which are neither available with the host country nor with the contributing member states.
- **UN owned Stocks.** If the UN is already holding stocks of food items and related facilities these can be issued to the contingent to meet their requirements. However, it is not possible for the UN to hold stocks of food items for everyone keeping in view their national food tastes and religious dietary customs. To offset this limitation, the UN has to depend on a combination of sources of supply to ensure smooth, uninterrupted and speedy flow of food services to the forces being supported.

Rations. A Ration is defined as all food commodities authorized for one person for one day as per the approved Mission Ration Scale. Ration entitlement is the number of rations to which a contingent is entitled based on the authorized contingent personnel strength. A unit's entitlement to rations is governed by many factors which, when combined, determine the commodities that a contingent is entitled to draw. These factors include:

- personnel strength of the unit;
- personnel on leave outside the mission area;
- visiting personnel from other contingents and UN visitors as directed by the FC;
- civilian kitchen staff;
- personnel hospitalized;
- special increments for national holidays and small units;
- the issue of composite rations; and
- approved contingent rations scale.

A unit commander is authorized to draw and provide meals, free of charge to:

- all military personnel of the Force Units;
- other Force members for whom a unit has been formally tasked to provide this support;
- Force and other UN personnel visiting a unit on temporary duty (in the case of UN personnel other than Force members, such direction must be included in the visit authorization or itinerary);
- locally recruited kitchen staff as identified by the Chief Civilian Personnel Officer(CCPO); and
- such other personnel authorized by the Force Commander.

For purely budgetary purposes, a "man-day" ration cost is determined for each mission. This figure is determined by dividing the total ration costs incurred during a mandate period by the corresponding number of man-days. This man-day cost is "all-inclusive" comprising daily ration issues, additional entitlements (small units, holiday, weather) as well as write-offs. It is not identical to the "daily ration food basket cost."

The average daily ration food basket cost (ration cost) as now being computed by missions is a hypothetical figure representing the average cost of a daily ration calculated on the basis of scale provisions. Since consumption does not necessarily mirror scale provisions, the ration cost figure does not accurately reflect the average cost of feeding one man in one day.

The Mission Ration Scale authorizes an extra ration supplement for small units in order to compensate for the larger proportion of food losses including preparation losses, unusable leftovers, etc., and difficulties in distributing food items to the positions.

Reserve Stocks. Situations may arise whereby units may become isolated and regular delivery of rations may not be possible due to weather conditions, the operational situation, transit difficulties or other reasons. Therefore, reserve rations are to be maintained in First Line by units. Second Line reserve stocks are normally held by the Log Unit's Ration Depot.

Unit Commanding Officers are responsible for the proper storage, control and rotation of reserve rations. Frequent inspections are to be carried out on all holdings of composite rations, especially those stored in bunkers.

The Mission Reserve of rations will be composed of a composite ration. It may be a UN issued combat nation or national combat nation as agreed with UN. A Mission Reserve of First and Second Line rations will be established during initial mission planning. It is usually a maximum of seven days at First Line and ten days at Second Line. Every unit must maintain its First Line holdings at the appropriate level.

Consumption of composite rations may be directed by the Mission HQ/CLO/SO Foods when necessary to prevent write-off due to expiration of shelf life. When this is ordered, all composite rations consumed will be accounted for as fresh rations. Unit Commanding Officers are responsible to ensure that the composite rations are consumed before they reach their expiry dates.

Water. Water is one of the most dangerous carriers of communicable diseases. In addition contamination is often intermittent and may not be revealed by examination of a single sample which provides information only on the conditions prevailing at the moment of sampling. For that reason it is very important that water be continually inspected. A First Line reserve of bottled water should be held at unit's level in all camps, positions and bunkers. A Second Line reserve of bottled water should be held at Mission level.

Provisioning of Food Services Equipment. The provisioning of food services equipment to smaller or observer missions and sometimes to the medium sized mission may not be a problem for the UN staff due to their limited requirements. The UN staff may be able to meet their requirements from within the host country. However, for a large sized multi-national contingent, provisioning of food services equipment on short notice will pose a problem mainly due to different national food tastes, method of cooking and equipment needed to meet cooking standards and requirements of each segment of the contingent.

Provisioning of Kitchens and Dining Facilities. If the "Status of Force Agreement" between the UN and the host country indicates that the host country is responsibility for the provisioning and maintaining of buildings and accommodations (including kitchens and dining halls) for the contingent, then the UN staff must ensure the following prior to the arrival of the contingent:

- Identify the areas and requirements to the host country where buildings/ accommodations would be needed;
- Take over the buildings and accommodations offered by the host country;
- Undertake necessary repairs and maintenance of the buildings and accommodations, if required; and
- Allot or earmark buildings and accommodations for various units within the contingent.

3.6 Ammunition and Explosives

General. The following general principles will apply within UN Missions with regard to ammunition and explosives:

- United Nations pays each troop-contributing country US\$5.00 per man/per month to cover weaponry including ammunition. Units are therefore responsible for deploying with complete First Line scales.
- Units will maintain their national stock levels of ammunition at the scale defined nationally and agreed to by the Mission HQ. Ammunition held as per national scaling is to be used for defensive purpose only.
- Second Line scales of ammunition and explosives will not normally be held in the mission area. Where the mission scenario dictates such reserves, they will be held centrally by a specialist Supply Unit within the FLSG. Second Line scales, if any, will be defined by Ops Branch (in conjunction with HQ UNNY). An ammunition technical specialist will normally be available in Mission HQ to provide advice on storage or defect investigation where no specialist Second Line unit is deployed.

- There will be no training reserve of ammunition held by the Mission. The unit will be responsible to procure ammunition for training purpose before they undertake training. This ammunition will not be reimbursed by the United Nations.
- Ammunition will be stored and controlled according to contingent national regulations **except** when these regulations are less stringent than UN regulations. To ensure commonality, storage, handling and transportation will be in accordance with use the International System of Hazard Classification based on Hazard Divisions and Compatibility Groups.

3.7 Petroleum, Oils and Lubricants

Responsibilities. The CPO is responsible for making contractual arrangements with sources of supply for the provision of POL products. The CPO will check receiving documents, certify invoices for payment, and provide certification to suppliers for tax exemption purposes.

Commanders of First and Second Line units will manage POL in accordance with the guidance provided herein. National procedures may be used when those procedures provide the same or greater level of management and accountability as prescribed by UN POL management procedures.

Demand, Receipt and Issue of Bulk POL. The SSO Sup will raise demands for provision of bulk POL indicating the type and quantities of fuels required, delivery locations, and date required. The CPO will contact the supplier and provide delivery instructions.

If required, the SSO Sup will develop local procedures for obtaining fuel from civilian stations, how to account for it, and payment procedures. Fuel coupon systems or standing contracts are typical means of providing and accounting for this service. Use of civilian fuel stations should be minimized by filling up (topping-off) vehicles at UN POL points.

Demand, Issue, Receipt and Accounting for Packaged POL Products. Packaged products include greases, oils, lubricants, and special products that are issued in sealed containers of less than 200 litres. Procedures for demanding, issuing, and receiving packaged POL products are the same as for all other consumable supplies. Consumption will be recorded in vehicle logbooks, in maintenance records or on work orders.

Aviation Fuels. Aviation fuels and additives will be provided by the CPO through contracted delivery, into-plane refuelling contracts, through the use of UN AVFUEL identaplates, or through reimbursement when national government credit cards or sources are used. When national sources of supply are used, national procedures will be used to test, handle and account for fuels received and consumed in support of UN missions.

LESSON 3
END-OF-LESSON QUIZ

1. Which of the following describes the three levels of the UN support structure?
 - a. Organizational, Direct, and General
 - b. First Line, Second Line and Third Line
 - c. Unit, Mission Area and Warehouse
 - d. Contingent, Logistics Base and Depot
 - e. none of the above

2. Which of the following is not a UN supply function?
 - a. Inventory Control
 - b. Distribution of Materiel
 - c. Receipt and Issue of Materiel
 - d. Acquisition of Materiel
 - e. Disposal

3. Who is responsible for receiving all unit demands and redirecting them to the appropriate branch or unit/element in the force.
 - a. the CLO
 - b. the CAO
 - c. the SSO Sup
 - d. the R&I unit
 - e. the FLSG

4. Who is authorized to enter into contracts with potential suppliers on behalf of the United Nations?
 - a. the Force Commander
 - b. the Chief Logistics Officer
 - c. the Chief Financial Officer
 - d. the Senior Staff Officer Supply
 - e. none of the above

5. List the six types of procurement activity.

1)	4)
2)	5)
3)	6)

6. Which of the following statements defines the term "Expendable Property"?
 - a. Property with an original purchase cost of less than US\$500.00, or an original purchase cost of US\$1,500.00 or higher but with a serviceable life of less than 5 years.
 - b. Property "of an attractive nature" and having a minimum value of US\$500.00.
 - c. Property valued at US\$1,500.00 or more per unit at the time of purchase and with a serviceable life of 5 years or more.
 - d. Property with an original purchase cost of less than US\$1,500.00, or an original purchase cost of US\$1,500.00 or higher but with a serviceable life of less than 5 years.
 - e. none of the above.
7. Which of the following items may be sold as a means of disposable?
 - a. Condemned items of operational equipment
 - b. Vehicles
 - c. Ammunition
 - d. UN clothing
 - e. Communications equipment
8. How long are peacekeeping forces to be self-sufficient in food/ration items from their date of deployment.
 - a. 15 days
 - b. 30 days
 - c. 60 days
 - d. 90 days
 - e. 180 days
9. Which of the following is NOT a general principle regarding ammunition and explosives in UN Mission?
 - a. units will deploy with First Line scales.
 - b. The procurement of training ammunition will be reimbursed by the UN.
 - c. Troop contributing countries will receive US\$5.00/man/month to cover the cost of weapons and ammunition.
 - d. There will be no training reserve of ammunition held by the Mission.
 - e. none of the above
10. Who is responsible for making contractual arrangements with sources of supply for the provision of POL products?
 - a. the Senior Staff Officer Supply
 - b. the Chief Logistics Officer
 - c. the Chief Procurement Officer
 - d. Commanders of First and Second Line units
 - e. the Chief Administration Officer

**LESSON 3
ANSWER KEY**

1. b. First Line, Second Line, Third Line
2. b. Distribution of Materiel
3. a. the Chief Logistics Officer
4. e. none of the above
5. Purchase Order, Direct Provisioning, Contract, Accelerated Procurement, Draft Requisition, and Letter of Assist
6. d. Property with an original purchase cost of less than US\$1,500.00, or an original purchase cost of US\$1,500.00 or higher but with a serviceable life of less than 5 years.
7. b. vehicles, but not operational military vehicles
8. c. 60 days
9. b. the procurement of training ammunition will be reimbursed by the UN
10. c. the Chief Procurement Officer

This page intentionally left blank.



LESSON 4

ENGINEERING SUPPORT

- 4.1 Introduction
- 4.2 Engineering Logistics Concepts
- 4.3 Field Mission Engineering Support Concepts
- 4.4 Guidelines for Accommodation, Facilities & Utilities
- 4.5 Infrastructure
- 4.6 Fire Protection Services
- 4.7 Environmental Protection
- 4.8 Geographic Support

LESSON OBJECTIVES

This lesson will concentrate on the provision of general engineering services and how the United Nations institutes a facility management program. The lesson will provide the student with information on the basics of engineering support in a mission area to include concepts, organizations and guidelines for facilities and infrastructure. The lesson will also explore the fire prevention, environmental and geographical support services provided by the United Nations.

By the end of Lesson 4, the student should be able to meet the following objectives:

- Understand the types and objectives of engineering services;
- Be familiar with the guidelines governing mission area infrastructure, accommodations, facilities and utilities;
- Understand the workings of Mission Fire Protection Services; and
- Be familiar with UN policy on environmental protection in mission areas.

4.1 Introduction

The objectives of general engineer support services are to plan, design, construct and maintain buildings and physical infrastructure, operate utility plants and provide fire protection, together with other related services, in support of the operational commitments of UN field missions. General engineer support services are provided in addition to "field" engineering services such as mine clearance which may be required in certain missions.

4.2 Engineering Logistics Concepts

UN field missions have a unique, complex, and critical engineer logistics environment. This involves identifying and preparing bases of operation; identifying and improving utility supply lines; projecting and preparing forward logistics bases; identifying potential sources of supply for engineering works; negotiating take over of facilities from Host Nation Support (HNS); and forecasting and building operational stock assets forward in the theatre. Many of these actions, if not engineer unique, are engineer intensive.

The UN engineer support relies on national contingents being self-sufficient at unit level for a given period, normally between 60 and 120 days. Depending on the situation, military units may be asked to deploy with a capability for self-help (engineer support) to develop their respective areas of responsibility.

Suggested Concepts for Future Missions. Engineers must be prepared to execute tasks from the full range of engineer functions. These may include contending with rapid deployment conditions, austere living conditions, lack of appropriate maps, destroyed infrastructure, multiple air and seaport development, extensive counter-mine and force protection operations, lack of construction materials, and civic action requirements. In general, engineer support concepts should be guided by the following principles:

- Maximum use of existing structures (controlled by the UN or by HNS);
- Modification of existing structures rather than constructing new ones;
- Austere design and construction techniques;
- Minimum engineer effort (maximum use of HNS Labor and contracting);
- Standard designs and specifications; and
- Establishment of office and care facilities (kitchen, dining and ablutions) takes precedent over living accommodations.

Engineer Support. The following areas are integral to ensuring appropriate engineer support to the mission:

Engineer Reconnaissance. This forms the basis for effective and efficient engineer support and includes:

- The nature of the country, to include its geography, history, demography, political, and economic climate;
- The laws, customs and agreements of the country including contracting conditions, real estate procedures, environmental laws, cultural impacts on construction, host-nation agreements, and international agreements;
- The engineering environment to include climate and weather, terrain and topography, soils and geology, elevation, vegetation, land use, hydrography, natural resources, and type, nature and amount of available construction materials; and
- The level and status of infrastructure to include aerial and seaports of debarkation, in-country transportation, and utilities (electrical power, water distribution systems, sanitation facilities and pipelines).

Establishing the Engineer Objective. These are derived from the overall objectives established by the Head of the Mission to achieve both specified and implied tasks, detail the essential taskings to be executed, the engineer effort required and construction materials needed, the approved and proposed construction standards, the estimated time required for execution and any special considerations such as civic actions, etc.

Tailoring the Engineering Support. The engineer resources are tailored to execute the identified taskings considering the capabilities of the available engineering support elements (military and civilian) available engineer capabilities. Engineer capabilities of the Force vary depending on the type of unit and country of origin. Many member states separate combat and construction engineer skills, others do not. Thus, planners must consider the specific capability and availability of the national units when building the engineering support component of the mission. This helps the planner request the appropriate type of engineer units and eliminates potential redundancy or lack of capabilities. Interoperability must be considered to ensure that assets are complementary, if not compatible. Engineer planners also consider assets available through the UN, contracts, the Host Nation Support, and private agencies.

Obtaining Construction Materiel. Engineer operations normally require large amounts of construction materials. Engineers identify, prioritize, and requisition, the required construction materials through supply channels. Engineers are to be involved in the specification and acceptance process. Construction materials not available in country should be requisitioned and delivered in small quantities as forces arrive in theatre. Follow-on transportation should include limited and frequent loads of construction materials allowing a steady flow into the theatre and precluding storage problems.

Protection, accommodation and other construction all require large quantities of construction materials. This commodity is critical to mission success and is often needed very early in the mission. The CEO must estimate requirements for theatre development and for a sustainment flow and what materials are available from local sources such as local manufacturers, commercial stockpiles, or Host Nation government assets. Protection requires large quantities of concertina and barbed wire, pickets and timbers; tent accommodation requires construction lumber and nails; infrastructure repair and construction requires concrete, asphalt, aggregate and dust palliatives, etc.

Supply and Procurement organizations process the requisition, receive, store, and transport construction materials. Engineers track the status of required construction materials in order to keep pace with the operation. Procurement time of several months may not be acceptable to mission needs; therefore, construction materials procurement may take on extraordinary procedures such as local purchase or contracting in proximity to the theatre. This decision on sourcing will be made by the CAO taking into consideration the Head of Mission's objectives and timing.

4.3 Field Mission Engineering Support Concepts

Engineering Support in the peacekeeping missions is provided through an Integrated Military and Civilian Support Structure. Mission Engineering Personnel coordinate, design, construct, install and maintain infrastructure, maintain and operate support systems, utility services and provide fire prevention and fire protection services, in support of the operational commitments, and towards the sustainment of the mission.

The primary task, especially at the outset of any mission, will be determining the infrastructure requirements and implementing the mission's infrastructure projects at minimum cost, a most efficient manner depending on nature and length of the mission.

The engineering support services will be the result of an integrated process where the military and civilian engineering components develop the infrastructure plans and then implement the projects staffed through and approved by the Mission's Integrated Support Services Unit. The engineering and technical component of the force from troop contributing countries and the civilian engineering component will be monitored by the mission's Integrated Support Services Unit. The Force Engineer's military staff at the Mission Headquarters will consist of engineers from the national contingents that constitute the force.

The military engineering component will be headed by the Force Engineer Officer (FEO) and the civilian engineering component will be headed by the Chief Engineer Officer (CEO). The taskings, areas of responsibilities, technical policies and the engineering operating procedure will be established by the Integrated Support Services Unit, in line with the mission's tasks, objectives, logistic directives and mandate.

Organization

The Chief Integrated Support Services (CISS) will be responsible for coordinating engineering activities within the mission and will be answerable to the CAO to the head of the mission. Thus, the FEO must maintain close coordination with the CISS. The primary task of the CISS will be to coordinate engineering related matters with the CEO and the FEO for their respective areas of responsibilities. The Office of Integrated Support Services will report both to the Force Commander's office as well as to the office of the CAO.

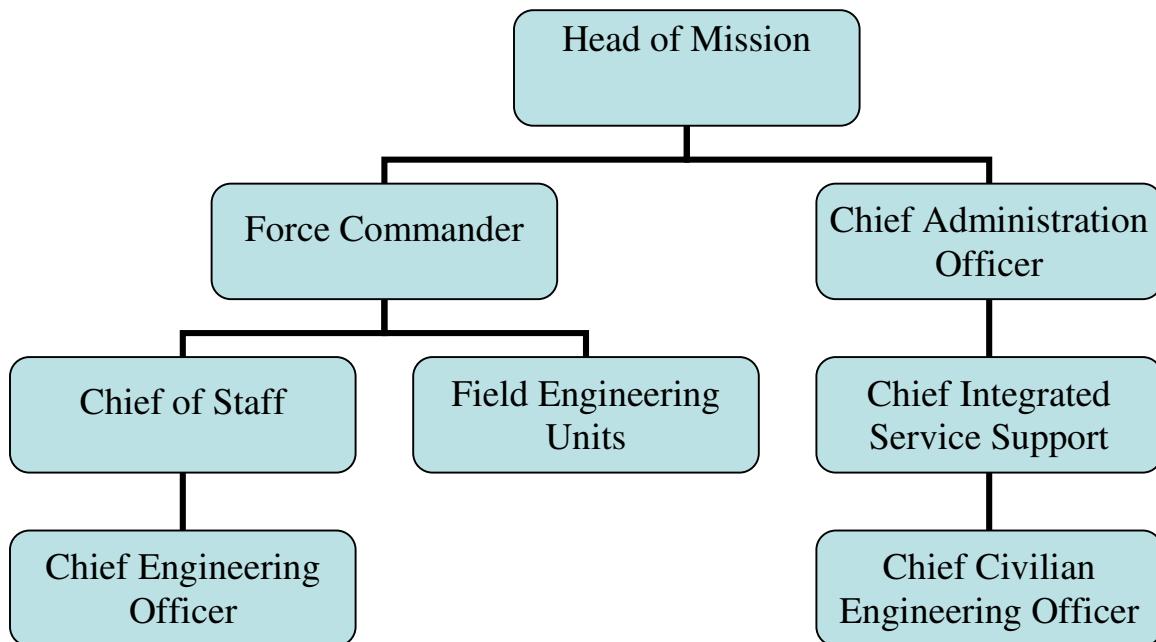


Figure 4-1

4.4 Guidelines for Accommodation, Facilities & Utilities

Standards of Accommodation. Requirements may vary extensively from mission to mission depending on geography, climate, HNS, civil contractors' support, in-theatre infrastructure, and contributing countries' (national contingents) facilities, materiel and services. Depending on the national contingents standards of self-sufficiency, initial accommodation of certain units may differ from the start. In the early days of a larger and more complex mission, UN logistic staff and units may provide little assistance to national contingents. Therefore national contingents are responsible to ensure they deploy fully equipped.

Water. One of the most important provisions is the supply of water, since it affects efficiency, morale, general health and welfare. It is required for consumption, decontamination, sanitation and construction, as well as for vehicle operation and maintenance. If these systems are non-existent or destroyed, water supply points are established for the deployment phase of the mission whenever possible by the mission's engineering elements. National contingents

deployed in any mission area must be prepared to initially secure water for themselves until engineers, quartermasters or other supply elements can establish water operations. Therefore, means of purification, storage and distribution of water should be a top priority when determining a contingent's equipment and supplies. The Operational Support Manual contains a chart of environmental conditions that should be considered when planning water support to a mission.

Sewage and Waste Water. Large troop concentrations at installed facilities generate requirements for sewage and waste collection and treatment. When using installed facilities (including HNS) in the mission area they usually include waste water systems. However, they may not be operational or suitable for military use. These systems should be operated, maintained and repaired by engineer elements or qualified indigenous personnel such as civil contractors. Field sanitation measures, such as pit or burn out latrines, lagoons for hospitals, etc., may be used in the initial phase of deployment until installed facilities are in operation.

Power Supply. Part of the engineering responsibility of providing utilities is the generating and distribution of electrical power. Power generating must be reliable since UN Observation Posts (OP), UN camps and positions, UN Check Points and HQs must be fully illuminated and visible at all times for safety and security reasons. In many cases the UN mission faces a complete lack of locally installed power supply systems or facilities which are in bad repair and/or barely covering the needs of the local civilian population. Therefore, when using locally installed systems adequate safeguards have to be taken to ensure reliable power supply operation can be guaranteed for mission elements. Consequently, diesel or gasoline generators should be installed and ready as backups.

Lighting. As mentioned above the lighting in and of all UN positions from dusk to dawn is essential to safety for UN personnel. The upkeep within contingent camps is a continent matter, although major repairs and maintenance can be coordinated at force level using generators, etc.

Heating. When UN mission areas require heating facilities, most central heating installations usually are restricted to camps with priority 1 troop accommodations and priority 2 offices, dining rooms, messes and hospitals. The use of electrical heaters should be minimized in order to economize electrical costs and generator loading. However, should UN contingents be deployed in more remote areas in frigid climates, the national contingents should carefully plan what type of heating equipment should be taken to the mission area. Type of fuel, access to spare parts, easy maintenance, and fire protection regulations must be taken into consideration. Propane water heaters are often used in preference to electrical water heaters in order to limit electrical costs and generator loads. Solar water heaters should be considered for installation in larger troop accommodation buildings, hospitals and kitchens wherever the climate allows and the expected duration of the Mission contributes towards economy.

Air Conditioning, Cooling and Refrigeration. In certain mission areas the installation of air conditioners may be essential for communication rooms, operation centres, hospital sickrooms, dining rooms, and troop accommodations. Cooling and refrigeration of food is another priority for all contingents. When installing small, portable refrigerators, consideration

should be given to operating both on electricity or gas to increase independence and flexibility. Any installation of air conditioning or large refrigerators, such as beer coolers, must be approved by the mission CAO/DOA, even if nationally funded, as the electrical and gas consumption of the cap or position will increase.

POL. Although POL includes a wide range of products necessary for the success of UN missions, engineer support to the class of supply is directed at the petroleum distribution effort. The distribution of propane in bottles or tanks is part of the supply system of the mission. The CEO, through the Engineering Management Cell, provides maintenance, excluding organizational maintenance, and repair of existing distribution systems. While these systems include both storage facilities and pipelines, Force level assets are limited to that effort above or beyond the capabilities of national contingents. The CEO is also responsible for design, construction and expansion of distribution systems in support of UN operations. This includes marine terminals and storage facilities. The engineer tasks associated with petroleum distribution systems include route clearing and flattening, and constructing gap crossings and pipe supports for pipelines while the construction of storage facilities, either for flexible storage tanks or bolted steel storage tanks, may require site clearance and levelling.

4.5 Infrastructure

Many of the UN missions face difficulties in their early stages in deployment and sustainment due to destroyed or non-existing Lines of Communication (LOC), Main Supply Routes (MSR), non-existent or destroyed seaports, airfields, heliports, and logistic facilities and utilities.

The minimum requirements for mobility, survivability, and sustainability of all mission contingents and units may vary depending on tasks, deployment areas and national support (self-sufficiency). Nevertheless, the general engineering capabilities combined at force level, contingent level and where applicable, must focus on the basic needs of the troops, observers and civilian staff deployed in the mission area. Early involvement of the force engineering cell and the national contingent's engineering units preferably in the planning stage of a new mission is essential.

Airfields and Heliports. For time phased deployment and rapid supply and re-supply of all units, airfields and heliports are essential. Wherever possible, the mission will use existing airfields in the mission area. The identification of existing airfields and heliports, including the requirement for new airfields, the extension or repair of existing facilities, and maintenance requirements is a very high priority in the early planning stages of a mission. The engineering capabilities of UN missions' force units and national contingents may often be less than adequate for such tasks, except for helipads, where the main problem will be to provide dust-free landing areas of limited size. Most likely the force will lack heavy engineering equipment, construction materiel, skilled troops, and funding for the construction of more than helipads. Therefore, once the reconnaissance has established facts of airfield and heliport shortfalls for the mission, the UN should be able to consider civil contracts. If a unit is available for airfield extension or construction, its engineers will have to enter the planning process at the earliest stage possible.

Seaports. Whereas the initial elements of a mission are most often deployed by air, the efficient and economic flow of troops and materiel into the theatre may depend on adequate port facilities as close as possible to the mission area. HNS agreements granting mission use rights are essential. Wherever possible, existing ports are used, rehabilitated or upgraded. The construction of new ports is normally beyond capabilities of national contingents participating in UN operations. The engineer mission is to support construction, repair and maintenance of different facilities, both above and below the waterline. But again, very few UN member states could provide the units, skills, and equipment necessary for these tasks. Therefore, the planning and mounting of a new mission will involve the use of existing and functioning port facilities which require as little as possible repair, upgrading or maintenance and will focus primarily on the Main Supply Routes (MSR) and Lines of Communication (LOCs) from the ports to the area of deployment.

Roads. An adequate road network is needed to transport personnel, equipment, and supplies for any UN mission. Wherever possible, the mission will rely on existing roads as the MSRs and LOCs. Though no engineer unit at force or national contingent level may be designed for road construction solely, many engineering elements will be engaged in this task during the deployment and sustainment phases of a mission. In many missions the road network, or lack thereof, will be essential to the success of the mission. Opening a country for the flow of relief supplies and for the resettlement of refugees and displaced persons will, in many cases, depend on engineer assets. As a result of decreased transit time relief agencies will depend less on air assets of the mission and more upon convoys. Mission forces will have more rapid access to critical areas and the opening of MSRs will allow humanitarian agencies to plan for repatriation of refugees. Opening roads may also act as a mechanism for determining mission force requirements. As forces are able to move rapidly along MSRs and have access to all areas of the theatre, smaller forces will be required. Humanitarian aid can be delivered in large quantities by road, replacing inefficient airdrops. As MSRs open contingent nations will be able to redeploy forces.

It should be acknowledged that all-weather surfaces for all MSRs and LOCs may be beyond the capability of Force engineers. Nevertheless, this should be the goal for all major routes.

The different realities of the mission area, such as geography, topography, in-theatre infrastructure, Host Nation Support, availability of heavy equipment and construction materiel, will have a major influence on the planning of roads. Therefore, road reconnaissance must be a top priority task of the earliest fact-finding team in the area. Only then can the necessary planning for upgrading, maintenance and repairing of roads be undertaken and at the same time costly and time-consuming deployment factors be minimized.

Bridges. Reinforcement or new construction of bridges may be required; thus a catalogue of all existing bridges, including their physical details, must be prepared. An efficient MSR network must be able to carry all expected traffic loads. Often, bridging is the weak link in the load-carrying capacity of a route.

Detours and Bypasses. Detours and bypasses are second in priority only to the use of existing bridges. Reinforcements and repairs of existing bridges are third in priority. In general, detours and bypasses can be found and used more quickly than existing bridges can be repaired.

4.6 Fire Protection Services

UN missions typically occupy austere accommodation in areas where fire fighting services are often rudimentary. Significant amounts of UN resources are invested in the infrastructure, equipment and vehicles of each mission. More importantly, the lives of all mission members are put at risk if fire protection services are inadequate. It is therefore essential that each mission create the safest possible conditions with respect to fire safety. The aim of this section is to provide general guidance for the establishment of effective fire protection services in UN missions.

Organization. The CEO is responsible for Mission fire protection services. He is assisted by a Force Fire Marshall who should be a fire services professional. Each national contingent should appoint a Fire Services Officer/Contingent Fire Chief from within its own organization. In observer mission team sites, the Team Leader should appoint an UNMO to act as team fire warden.

Responsibilities. The Force Fire Marshall (FFM) is responsible to the CEO for the provision of fire services to the mission. He will advise and assist contingents in fire fighting and fire prevention training for all personnel, review all contingent fire reports, conduct regular fire prevention inspections, and control the use and financing of fire fighting equipment. If the mission is established with a fire fighting brigade, the FFM will exercise command over this unit.

Commanding Officers (COs) are responsible to ensure that fire awareness is developed throughout their command. They must appoint the Contingent Fire Chief, who shall also be the Contingent Fire Prevention Officer and Fire Prevention Committee member and promulgate Contingent Fire Orders to be posted in camps and operational positions.

Contingent Fire Chiefs are responsible for determining potential fire hazards in their unit, to reduce hazards and to prevent injury. They should prepare contingent Fire Fighting Plans, ensure all contingent fire fighting equipment is in serviceable condition on a regular basis, hold contingent fire prevention and fire fighting meetings, and established their own fire prevention committees.

Fire Fighting. If a fire breaks out, it is everyone's responsibility to extinguish it immediately using all available means. Control of fire fighting operations shall be the responsibility of the Contingent Fire Chief and orders relevant to the operations shall be given only by the Contingent Fire Chief or his delegated subordinate. The Contingent Fire Chief or his delegated subordinate shall take orders only from the CO or his delegated officer. Such delegated officers shall not interfere in the immediate direction of fire fighting operations unless it is apparent that this is essential.

Contingent Fire Forces are responsible for the immediate response to all contingent fire incidents. Under the direction of the Contingent Fire Chief, they shall carry out all fire fighting and rescue operations within the capability of their manpower and resources. Where the fire incident is beyond their control or capability, they shall request assistance from the neighbouring contingent in the mission. Control of joint fire fighting between two contingents will be coordinated between the two Contingent Fire Chiefs. The Chief from the contingent where the fire is located will be in overall command and responsible for the operation.

Contingent Fire Chiefs are responsible for all aspects of fire fighting training for their fire department personnel. Training exercises are to be coordinated with the Force Fire Marshall, who will attend these sessions periodically to evaluate and assist contingents to ensure a high level of preparedness is maintained at all times.

All fire fighting equipment shall be the responsibility of the applicable Fire Department. The Contingent Fire Chief will maintain an up-to-date inventory of all fire fighting equipment and shall ensure that the equipment is kept in a high state of readiness at all times. When new equipment is required, requests shall be submitted to the Force Fire Marshall for approval and purchase by the mission procurement staff.

Fire Reporting and Investigation. Contingent Fire Chiefs shall submit an immediate fire report on all fire incidents. At positions in which there is no response by a contingent fire force, it is the responsibility of the position Commander to submit an immediate report. It shall be forwarded to the Force Fire Marshall by the fastest means available (telephone, radio), followed by a written copy, usually within fourteen days of the incident. The appropriate format should be found in the Mission Logistics Directives or similar publication.

A technical investigation of all fires in fixed installations shall be carried out by the Force Fire Marshall and Contingent Fire Chief. The results of the investigation shall be recorded and if arson or sabotage is suspected, the CO shall be informed immediately. The purpose of the technical investigation is to determine the cause of and the factors contributing to the fire and to determine the size of the loss. Boards of Inquiry will be ordered for all major fires, or where death, serious injury or arson is involved.

Fire Inspections. The prime purpose of fire inspections of buildings and facilities is to ensure that hazards are eliminated or controlled to the point of minimum risk to life and property and that fixtures such as exits and fire escapes are serviceable. A further purpose of fire inspections is to enable fire protection personnel to relate risks and hazards involved in any particular occupancy with the design aspects of a structure such as fire escapes and exits, main electrical services, extinguishing equipment and the general floor plan.

The Force Fire Marshall shall inspect camps and units on an annual basis to advise COs on fire protection matters and to inspect units and fire protection services. When problems arising out of these visits cannot be resolved within the resources of the camp or unit, they shall be submitted to mission HQ through normal channels for resolution. Detailed supporting data and relevant recommendations must be provided to enable evaluation.

Fire Orders. Each mission and contingent within a mission shall develop comprehensive Fire Orders. All personnel in the mission are to be made familiar with these orders. The orders are to be prominently displayed at all times.

4.7 Environmental Protection

As UN missions take place in nations that have sometimes been undergoing considerable turmoil and strife in their internal affairs, environmental protection will have assumed a low priority compared to other issues of national concern. This does not give the UN mission a license to ignore environmental protection. The UN has a special obligation to act responsibly towards the environment of the Host Nation and to set a good example.

Responsibilities. Environmental regulations will differ in every UN mission area, even to the point of there being potentially conflicting legislation between various jurisdictions in the mission area. This section summarizes some current and practical information on environmental issues specifically relevant to commanders and staffs. Every UN mission member, civilian or military, must conduct his or her affairs with the following themes always in mind:

- Protection of the environment is every individual's responsibility;
- Sound planning is essential to minimize damage to the environment, economize on local resources, and make best use of UN funds; and
- The environment must be considered in the planning and undertaking of every activity.

Environmental Policy. Each UN mission should issue an environmental policy to guide the actions of its units and individuals. This policy must be taught to mission members to ensure they are aware of the commitment of the mission to sound environmental practices.

Environmental Action Plan. Each UN mission should create an Environmental Action Plan in which specific measurable, achievable, realistic and timely targets for environmental protection measures to be undertaken are detailed. Responsibilities for achieving each specific target must be clearly stated and known by everyone.

Energy and Water Conservation. Energy saving practices include such simple things as turning off unnecessary lights, keeping doors closed to conserve heat and maintaining vehicle fleets to reduce fuel consumption. Water use can be reduced through such elementary methods as using flow reduction devices in bathroom and kitchen facilities.

Natural Resource Management. The Environmental Action Plan should include sustainable management of all the lands occupied by the mission. The plan should ensure protection of present resources, mitigate against potential environmental impacts and restore any areas already polluted or damaged. In particular, rare or endangered species must be identified and protected.

Hazardous Materiel. A major element of the Environmental Action Plan should be an examination of the mission's hazardous materials procedures. Every mission should have a Hazardous Materiel Management Plan (HAZMAT Plan). It must, as a minimum, agree with HAZMAT handling regulations of the Host Nation.

Personnel Awareness. In a typical UN mission, the number of nations represented by troops and civilian staff will create a wide divergence in the degree of environmental awareness amongst mission personnel. Any successful personnel awareness campaign will need to be proactive. All personnel must share both a basic environmental awareness and a knowledge of their individual role in environmental protection. All commanders should ensure that relevant environmental concerns are addressed in all activities in the mission. In all tasks, personnel should be made aware of practices that will preserve the environment.

Community Relations. An Environmental Action Plan is not complete without an effective community relations program which creates a positive public image of the mission's commitment to environmental protection. Cooperation with the HN on environmental issues makes the public aware that the UN is a good corporate environmental citizen. A secondary benefit is that UN operations are likely to gain increased acceptance once the public sees the UN commitment to protecting the local environment.

Recognition and Reward. Environmental commitment can be increased by implementing a system to recognize the environmental achievements of units, branches or individuals, either informally or through an environmental incentive award program. A way of promoting and recognizing environmental initiatives is through friendly competition between elements of the mission, such as comparing results in fuel reduction programs. At the very least, the results of environmental programs should be widely publicized so that participants can see the results of their collective efforts.

4.8 Geographic Support

Few commodities affect UN missions more than geographic support products and services. Missions are often dispatched to relatively remote areas, for which high quality geographic products are not available. Host Nations are often reluctant to provide the UN with a complete range of geographic information, even when it exists. Contributing nations sometimes have the capability to make up shortfalls for their contingents, but this can cause problems of incompatibility between mission HQ and contingents when different map scales or datum are used. Regardless of these potential difficulties, adequate amounts of high quality, current geographic products and services will be essential to mission success. The aim of this section is to provide general guidance for the provision of geographic support to UN missions.

Geographic Products and Services. Mission staffs must think in terms of the following representative list, some or all of which would be useful to UN missions:

- Paper maps;
- Overlays and traces;
- Digital terrain data;
- Terrain analysis;
- Satellite imagery;
- Photo mosaics and photo mosaic maps;
- Map depot services;
- Ground survey services;
- Aeronautical charts; and
- Hydrographic charts.

Organization. The UN has no internal geographic support production capability tailored to specific requirements of the missions. Products and services must be obtained from Host Nations, contributing states or third parties.

**LESSON 4
END-OF-LESSON QUIZ**

1. General engineer support services are provided in addition to which of the following services?
 - a. Logistics support
 - b. Field engineering support
 - c. Demining support
 - d. Fire protection support
 - e. none of the above
2. The UN engineer support concepts relies on units to be self-sufficient for?
 - a. 30-60 days
 - b. 30-90 days
 - c. 60-90 days
 - d. 60-120 days
 - e. 90-180 days
3. Which of the following is not an area integral to ensuring appropriate engineer support to the mission?
 - a. Engineer reconnaissance
 - b. Using austere design and construction techniques
 - c. Establishing the engineer objective
 - d. Tailoring the engineer support
 - e. Obtaining construction materiel
4. Who decides on the sources of construction materials?
 - a. the Force Engineer Officer
 - b. the Chief Integrated Support Services
 - c. the Chief Administration Officer
 - d. the Chief Procurement Officer
 - e. the Chief Logistics Officer
5. Who is responsible for coordinating engineering activities within the mission?
 - a. the Chief Administration Officer
 - b. the Force Engineer Officer
 - c. the Head of Mission
 - d. the Chief Integrated Support Services
 - e. the Force Commander

6. Which of the following have a major influence on the planning of roads?
 - a. geography
 - b. Host Nation Support
 - c. availability of heavy equipment
 - d. in-theatre infrastructure
 - e. all of the above

7. Who provides maintenance and repair of existing POL distribution systems?
 - a. Contingent Field Engineer Units
 - b. the Force Logistics Support Group
 - c. the Engineer Management Cell
 - d. the Force Engineer Officer
 - e. none of the above

8. Who is responsible for the provision of fire services?
 - a. the Force Fire Marshall
 - b. the Chief Engineer Officer
 - c. the Force Engineer Officer
 - d. the Contingent Fire Chief
 - e. the Force Commander

9. How often should the Force Fire Marshall conduct a fire inspection of camps and units?
 - a. on request of the Commanding Officer
 - b. monthly
 - c. semi-annually
 - d. annually
 - e. as required

10. Which of the following makes an Environmental Action Plan complete?
 - a. Personnel awareness
 - b. Community relations
 - c. HAZMAT plan
 - d. Energy and water conservation
 - e. Natural resource management

**LESSON 4
ANSWER KEY**

1. b. field engineering support
2. d. 60-120 days
3. b. Using austere design and building techniques
4. c. the Chief Administration Officer
5. d. the Chief Integrated Support Services
6. e. all of the above
7. c. the Engineer Management Cell
8. a. the Force Fire Marshall
9. d. annually
10. b. community relations

This page intentionally left blank.



LESSON 5

TRANSPORTATION

- 5.1 Organization**
- 5.2 Methods and Procedures**
- 5.3 Tasks and Responsibilities**
- 5.4 Transportation Procedures**

LESSON OBJECTIVES

This lesson will cover intra-theatre and inter-theatre transportation issues. It will delineate the role and responsibilities of the transportation system for the movement of troops, equipment and materiel and for fleet management. Additional topics will include registration, licensing and insurance requirements and accident reporting.

By the end of Lesson 5, the student should be able to meet the following objectives:

- Describe the organization of transportation services and related responsibilities;
- Differentiate between Movements and Transportation; and
- Understand the control and administration of Mission vehicle fleets.

5.1 Organization

UN Headquarters. The Office of Mission Support (OMS) coordinates all administrative and logistic support to field missions. Within the OMS there is a Movement Control Unit (MCU) which is responsible for the planning, management, and coordination of all air and sea movements, both deployment and rotation, for the military contingent personnel deployed in the various missions. The MCU prepares the administrative guidelines for deployment and rotation included in the "Guidelines for Governments Contributing Troops" which is given to the individual Permanent Missions.

At the mission headquarters level, there is a complimentary movement control organization responsible for in-theatre transportation support.

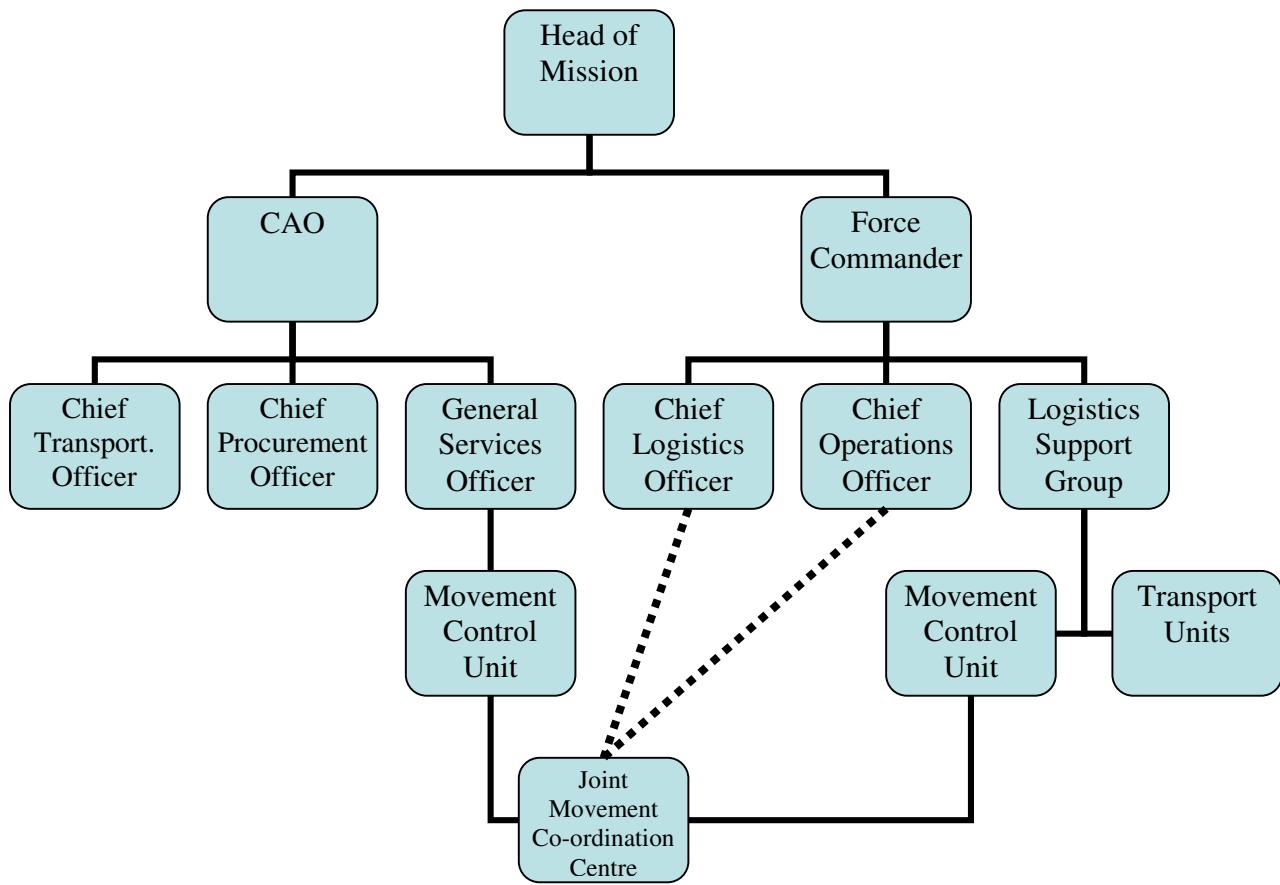


Figure 5-1

The Civilian Component. The Chief Administrative Officer (CAO) is appointed by and responsible to the OMS at UN Headquarters, and acts as its representative at the force or mission headquarters. Under the overall authority of the head of mission, on behalf of the OMS, the CAO is responsible for all administrative functions and providing the requisite administrative support for carrying out the substantive work of the mission efficiently and economically. Within the DOA/CAO's organization, a number of branches are involved in transportation:

- **Transport Branch.** The Chief Transport Officer (CTO) is responsible for coordinating and controlling the allocation, distribution, and maintenance of UN owned vehicles. The CTO may also run a motor pool of UN owned and rental vehicles.
- **General Services Branch.** The Chief General Services Officer (CGSO) is responsible for the provision of travel and traffic services in coordination with the movement control staff of the military component. The GSO may also operate a mission level MCU to manage personnel movement in the mission area
- **Procurement Branch.** The Chief Procurement Officer (CPO) is responsible for the procurement of all materiel and services required for all components. As such, his interaction with the military component is multi-faceted and is the most demanding in terms of coordination.
- **Finance Branch.** The Chief Finance Officer (CFO) is responsible for the maintenance of the mission budget, commitment accounting, and all financial transaction settlements, travel expenses, per-diem payments, locally hired personnel pay and benefits, materiel and services.

The Military Component. Within the military headquarters, the following appointments are normally involved in transportation support:

- **Chief Logistics Officer (CLO).** The Chief Logistics Officer is responsible to the Force Commander, through the Chief of Staff, for directing and implementing the logistics support for the Force and its contingents. His supply, maintenance, and equipment requirements need the approval of the Chief Administrative Officer before being submitted to New York.
- **Chief Operations Officer (COO).** The Chief Operations Officer is responsible to the Force Commander for directing and implementing the operations of the military force and its contingents. The COO will normally control dual role units, like aviation units, and will have to coordinate prior to tasking them for use in the transportation role.
- **Transport Unit.** Transport units may be part of a larger national or multinational logistic organization, and will usually deploy with a preponderance of general-purpose vehicles.
- **Military Movement Control Unit (MCU).** The headquarters of the Movement Control Unit (MCU) will normally be collocated with the civilian component's MCC under the GSO where effective coordination can be exercised. The Military MCU is responsible for mission area movement of military forces and equipment and will be expected to cater for detached movements. Hence, this unit is usually formed of a number of detachments operating at airports, seaports, and railheads.

5.2 Methods and Procedures

General. In describing the methods and procedures of the transportation system, it is necessary to divide them into two parts, namely **Inter Area Movements** and **Internal Area Movements**. Inter Area Movements are all of those movements which originate or conclude outside of the mission's Area of Operations. These outside movements are commonly known as Deployment, Sustainment, Rotation, and Redeployment. Internal Area Movements are all of those operations or movements which remain within the mission's Area of Operations. These internal movements are commonly known as Sustainment. Along with these two types of movements is the unit charged with the coordination and control of the entire transportation system, the **Joint Movement Control Centre (JMCC)** and its responsibilities.

Inter Area Movements. Inter Area Movements (also known as Strategic Movements) comprises all movements of personnel, vehicles, equipment, and materiel from participating countries to and from the UN mission area by means of transportation by air and sealift or, on the ground, through transit countries by means of road, railway and inland-waterway transportation.

The mode of transportation depends on traffic and transportation infrastructure of the mission area as well as its accessibility by various means of transportation. Reconnaissance of all means should be made in advance of any movements. Since a number of carriers will be requested to submit bids, a national carrier of the troop contributing country will compete on an equal footing with other carriers for an award of the contract.

Inter Area Movements are sub-divided into four general types, namely:

- **Deployment.** This phase begins with the actual deployment of national contingents and UN personnel into the area of operations. OMS will coordinate all transportation into and from the theatre.
- **Sustainment.** Initially the forces deployed into the area of operations must bring with them enough stores until the sustainment phases begins. This period is designed to allow time for the UN logistic system to organize and gradually transition to civilian and contractor support. The CAO is responsible for the sustainment for the force, both the civilian and military components. To improve on cost effectiveness, OMS may authorize a contributing country, on the basis of a Letter of Assist (LOA), to carry out movements for other countries to coordinate their transportation efforts for their contingents in the mission area. Elements of the pertinent countries is a prerequisite.
- If the contingent is operating under a Contingent Owned Equipment Agreement, then sustainment transportation costs are included in the generic price for equipment and the distance to the mission area.
- **Rotation.** Normally contingent rotation will be every six months. Unit rotations will be arranged by the UN. It is the responsibility of the contingent's government to inform the UN at least six weeks prior to the rotation of the exact dates they propose for the rotation and the number of troops to be rotated each way.
- **Redeployment.** The procedures for arranging transport are the same as for Rotation while the responsibilities and control are the same as for Deployment.

Procedures. In general, for Inter Area Movements, when a country has agreed to provide personnel or equipment to a mission, or if they are due to rotate their personnel, their Permanent Mission (PM) is contacted in writing in order to determine if they agree to the proposed dates, number of personnel and equipment to be moved as established by DPKO or the mission command. If they so desire, they may request to provide transportation service under a LOA. If a country requests to provide the service, they must indicate what they expect as far as payment from the UN. If the sum is deemed to be unreasonable or if it could be done by a contractor for a lower price, the UN would then offer to reimburse the government for the lower amount. At this time, the nation, through its Permanent Mission, must decide if they are still willing to complete the movement for the reimbursable amount. If not, the UN will provide the transportation service.

Reimbursement. As a general rule, if required, reimbursement will only be made up to the amount it would have cost the UN to have organized the move. Also, the UN reserves the right to delegate, by issuing a LOA, the transportation request to the troop contributing nation, with its concurrence, or to a third party.

Movements not covered by the pertinent UN guidelines, or even contradictory to them, have to be financed, organized, and performed by the nations themselves. These include transport to cover demands not reimbursable as well as additional national transportation efforts for the well-being of mission personnel, such as intermediate flights to the home country for vacation or recreation purposes as well as in cases of additional dispatches of mail to the home countries exceeding the limits drawn by the mission-related UN guidelines.

Generally OMS will organize all deployments and rotations, however the deployment may be organized by the troop contributing government, but in such cases arrangements must be agreed upon by OMS in advance. Since OMS is responsible to coordinate transport into and out of the area to the home country on the completion of the tour of duty, they require a certain amount of time to accomplish these tasks. Failure to provide the required information, in time, may delay the movement of the contingent concerned. Six to seven weeks, plus sailing time for a sealift, prior to deployment is required to allow proper implementation of the deployment.

Government Arranged Transportation. If the UN is not handling the Deployment or Redeployment transportation, the Contributing Nation must inform the UN of the details of its movement arrangements. The costs of such arrangement are to be borne by the Contributing Nation.

Rotation Arrangements. For **Rotation** of troops, the same information above is required for the appropriate means of transportation, except include both the air point of embarkation (APOE) and air point of debarkation (APOD). Also, the following general guidelines apply:

- normal rotation will be every six months;
- in principle, the UN will arrange the transportation, usually by scheduled or chartered commercial aircraft; however, nations may prefer to arrange rotation themselves;
- the UN must be informed at least six weeks prior; and
- usually only troops, including personal weapons, will be rotated.

The chartering of aircraft for rotating military personnel of national contingents is arranged and coordinated by the OMS in consultation with the relevant national authorities, the mission, and the contingents concerned in the field.

Once the contract is awarded, the OMS MCU through the CAO will inform the appropriate agencies in the mission area, including the JMCC. The JMCC is responsible to ensure outgoing personnel, baggage, and cargo are present at the airport at the agreed time, and that transport is provided for incoming passengers, their baggage, and additional cargo to the destinations. It is the JMCC, who on behalf of the UN, is in charge of the supervision of the rotation of the military personnel of a mission and the turn-around of the aircraft according to the flight schedule.

Immediately after the take-off of a rotation flight from the mission area, the JMCC, with general authorization from the CAO, notifies OMS by fax, or other electronic means. The conclusion of the rotation is to be reported after the last flight in the rotation cycle. An evaluation and commendation may be included.

Internal Area Movements. Internal Area Movements, also known as Theatre Movements, are normally concerned with sustainment. Once the sustainment phase has begun, internal sustainment pertains to the movement of supplies and equipment within the UN's Area of Operations. Primarily this is concerned with the transportation movement from rear (headquarters) operating areas to forward (unit) operating areas. These movements are usually satisfied by regular scheduled runs by the CLO, or for incidental requests through normal transportation requesting procedures through the MCC.

Transportation in the mission area is divided into two echelons:

- The 1st echelon (**1st line transportation**), comprises all transportation within a contingent area and is executed by transportation assets organic or attached to a contingent or unit and controlled by the contingent or unit commander. It may include scheduled transportation such as re-supply runs or local shuttle runs and ad-hoc transportation requirements.
- The 2nd echelon (**2nd line transportation**) comprises transportation for carrying troops or supplying deliveries within the rear area and forward to contingents, as well as transportation for contingents and units which cannot be executed with organic assets. 2nd line transportation assets are controlled by the Force Commander. These assets may be supplemented with locally hired commercial transportation assets, or the requirement may be executed by using local transportation services such as rail, road, river barge, or air.

2nd line transportation is coordinated and controlled by a Movement Control Unit (MCU). Both the Civilian and the Military components of a mission have a MCU element attached.

- The civilian MCU is under the Chief Administrative Officer (CAO). It includes a Movement Control Cell (MCC) for coordinating all 2nd line transportation requirements. The MCU will also operate one or more Movement Control Detachments (MCD) to control movements through airports, seaports and railheads. This will include incoming and outgoing personnel and freight movements (internal area movements).
- The MCU of the military component operates under the Chief Logistic Officer (CLO). It reflects the functions of the civilian MCU with a MCC and MCDs, however, with a separate chain of command.

Economic and efficient use of available resources is a prime consideration in the planning and executing of transportation operations, the MCCs of the civilian and the military component will be collocated and operate as a single Joint MCC (JMCC).

The MCUs have no organic 2nd line transportation assets. They therefore have to coordinate with the Chief Transport Officer (CTO), or in the military organization with the CLO, for transportation units under his control, or the Chief Operations Officer (COO) for units under his control; dual-role units, like aviation units, will normally be controlled by the COO.

Local hire contracts are the responsibility of the Chief Procurement Officer (CPO) who is part of the CAO organization. All requirements for local hire from both the civilian and military components, are to be submitted by the JMCC directly to the CPO for approval and eventual contracting.

5.3 Tasks and Responsibilities

The **Movement Control Unit (MCU)** is responsible for organizing and executing the movement control function within the mission area.

The **Joint Movement Control Centre (JMCC)** is tasked with coordinating all 2nd line transportation requirements within the mission area. It has control over all 2nd line transport assets made available to the mission. As far as military assets are concerned, the control function is, however, limited to those assets not required or allocated by Force HQ for other duties. The COO and CLO are empowered to set priorities in case of conflicting requirements. The JMCC is formed by the Movement Control Centre (MCC) of the civilian component, a branch of the General Services section, and the MCC of the military component, part of the Movement Control Unit. The Chief of the JMCC will be either from the civilian or military MCC and will be appointed in agreement between the Head of the civilian MCU and the Commander of the military MCU.

The Chief Transport Officer (CTO) is part of the civilian component. He is the Chief of the Transport Section and as such responsible for:

- **Registration of all UN vehicles.** All vehicles operated by the UN, either by the civilian or military elements, are to be centrally registered and issued with UN vehicle registration plates.
- **Maintenance and repair of UN owned vehicles.** Maintenance and repair might be contracted out or accomplished by UN mission repair facilities.
- **Conduct of driving tests.** Driving UN vehicles requires a valid UN driving license which will be issued after successfully passing a driving test.
- **Issue of UN driving licenses.** UN driving licenses may be issued to UN personnel only. A valid national driving license and passing the UN driving test are required for the issue of a UN driving license.

5.4 Transportation Procedures

Administrative Procedures

- **UN Identification Markings.** All vehicles will be white with black UN lettering prominently displayed on the top and sides of the vehicles, as well as on its front and rear. Markings will be kept visible at all times. No national markings are permitted to be displayed on contingent or unit vehicles.
- **Issue of vehicles.** UN procured or hired vehicles will be issued to the user by the CTO. Vehicles will primarily be issued from the motor pool on a "single trip" basis. Permanent issues to single users must be limited to specific situations to ensure economic and efficient use of available assets.

Authorized Use. The use of UN transport is restricted to:

- duty travel, which excludes travel for private benefit;
- members of the UN Force or Mission; and
- exceptions can be made for other persons such as locally hired drivers or liaison officers from parties to the dispute when such travel is necessary to the performance of their UN duties.

Accident Reporting Procedure. When involved in an accident, the driver must stop his vehicle and conform with the set procedure laid down by the Mission. This procedure should be well understood by all drivers and is to be issued to them in writing as part of the vehicle documents.

Investigation of traffic accidents will be conducted by the UN Military Police, or by the Civilian Security Section Investigation Unit.

**LESSON 5
END-OF-LESSON QUIZ**

1. Who is responsible for the planning, management and coordination of all air and sea movements for the military contingent deployed in the various mission areas?
 - a. the Mission
 - b. the Contingent Transportation Officer
 - c. the OMS Movement Control Unit
 - d. the Chief Transportation Officer
 - e. none of the above

2. Within the Mission civilian component, who is responsible for the provision of travel and traffic services?
 - a. the Chief General Services Officer
 - b. the Chief Transport Officer
 - c. the Chief Procurement Officer
 - d. the Chief Finance Officer
 - e. none of the above

3. Which of the following is the term used to describe movements which remain in the Mission's Area of Operations?
 - a. Inter Area Movements
 - b. Internal Area Movements
 - c. Joint Movements
 - d. Operational Movements
 - e. none of the above

4. When a Contributing Nation requests to arrange their own transportation service to the mission area under a Letter of Assist, which of the following is the guideline for reimbursement?
 - a. actual and reasonable costs incurred by the Contributing Nation
 - b. comparable UN contractor price
 - c. the difference between actual costs and contracted price
 - d. a fixed price based on number of personnel and equipment and the distance to the Mission in increments of 500 miles/800 kilometres.
 - e. another type of formula.

5. Which of the following is not normally reimbursable by the United Nations?
 - a. periodic sustainment flights of spare parts
 - b. vacation travel of members to home country
 - c. travel arrangements for national delegations visiting their contingents
 - d. rotation of equipment
 - e. all of the above
6. Who is responsible for coordinating all Second Line transportation requirements within the mission area?
 - a. the Joint Movement Control Centre
 - b. the Chief Logistics Officer
 - c. the GSO Movement Control Unit
 - d. the military component MCU
 - e. the Chief Transport Officer
7. Which of the following is not required in order to operate a UN vehicle?
 - a. the vehicle is painted white with black UN lettering prominently displayed on the top and sides of the vehicle, as well as on its front and rear
 - b. the driver has a valid UN driving license
 - c. the vehicle has UN registration plates
 - d. the driver is a member of the UN Force or Mission
 - e. none of the above
8. Who is responsible for the local hire of transport resources?
 - a. the CTO for the civilian component
 - b. the CLO for the military component
 - c. the JMCC for all components
 - d. the CPO for all components
 - e. the CAO for the mission
9. Which of the following is the prime consideration in the planning and execution of transportation operations?
 - a. the objective of the mission
 - b. the coordination of contingent transport resources
 - c. supplementing UN Resources with locally hired commercial transportation assets or using local transportation services (rail, road, barge or air services)
 - d. the economic and efficient use of available resources
 - e. minimizing road traffic to conserve resources
10. Who is responsible for fuel accounting?
 - a. the Chief Transport Officer
 - b. the Chief Finance Officer
 - c. the Chief Procurement Officer
 - d. each individual driver
 - e. each contingent Transport Officer

**LESSON 5
ANSWER KEY**

1. c. The Office of Mission Support Movement Control Cell
2. a. The Chief General Services Officer
3. b. Internal Area Movements
4. b. comparable UN contractor price
5. e. all of the above
6. a. the Joint Movement Control Centre
7. e. none of the above
8. d. the Chief Procurement Officer for all components
9. d. the economic and efficient use of available resources
10. a. the Chief Transport Officer



LESSON 6

AVIATION AND AIR SERVICES

- 6.1 Introduction
- 6.2 Organization
- 6.3 Acquisition and General Guidance to Contribution
- 6.4 Transport of Passengers and Cargo
- 6.5 Airfield Management
- 6.6 Maintenance
- 6.7 Flight Safety

LESSON OBJECTIVES

This lesson will cover the special arrangements required for the provision and use of air or aviation services in a peacekeeping mission area. The lesson will acquaint the student with the particular legal aspects of air services, the conduct of air operations, airfield management and flight safety. An overview of aircraft maintenance procedures will be covered as well.

By the end of Lesson 6, the student should be able to meet the following objectives:

- Understand the type of air services available to a mission;
- Describe the organization of air services;
- Be familiar with the general regulations and restrictions of aircraft use in a mission area; and
- Understand the operations of a UN airfield.

6.1 Introduction

Aviation and Air Services are an important and often vital part of United Nations peacekeeping and observer missions. The purpose of these services is to support the achievement of the United Nations (UN) operations. Helicopters or fixed wing aircraft, which are made available by the Host Nation, Contributing Governments, UN Contractors, pro-bono or from other sources, may be utilized to accomplish the UN Mission.

The following aviation tasks may be required as part of the logistic support:

- Aerial deployments of quick reaction forces;
- Intra-theatre passenger flights;
- Intra-theatre logistics airlift;
- Theatre support to troop rotations;
- Helicopter slinging and hoisting;
- Support to all components of the mission;
- Liaison Transport;
- Search and Rescue (SAR);
- Emergency Medical Evacuation;
- Aerial observation and surveillance; and
- Welfare/Morale support.

The type of aircraft involved depends largely on the duties to be performed, the area of operation and the topography, the availability of suitable airports, helipads and landing sites. Depending on these aspects, the aircraft involved may be either fixed wing or rotary; short, medium or long range aircraft with the capability of passenger or cargo transport; the air freight might be air-landed or air-dropped.

Air services will vary in size and may range from one flight by one aircraft to a complex air bridge including different types of aircraft with different capabilities from different Nations and Contractors. The required planning and coordination measures will largely depend on the size of the operation.

6.2 Organization

On behalf of the Head of Mission and in cooperation with the DOA/CAO and the contingent concerned, the **Chief Movement Control Officer (CMCO)** is responsible for the proper handling of all rotation flights in accordance with existing regulations and mission directives. The DOA/CAO's aviation staff is responsible for all civil aviation contract control and monitoring of civil aviation performance and safety.

6.3 Acquisition and General Guidance to Contribution

Acquisition. Irrespective of the type of aircraft or its source, the contract arrangements for aircraft support are handled by the OMS. Each nation and contractor contributing air assets and personnel will include sufficient elements to form the Mission Air Operations Control Centre (AOCC) and air staff. In addition, air units will be expected to deploy with sufficient air maintenance capabilities as well as the necessary air-to-ground and air-to-air communications. One of the air units might be expected to deploy with a meteorological element. Traffic control, flight safety, airfield management as well as mobile air movements sub-units and elements may be called in to assist in the task of providing efficient air support services to missions. Size, final structure and strength will depend upon the mission assigned to each unit.

Commercial contracts. The chartering of commercial aircraft both for a short and a long term period is arranged and coordinated by the OMS in consultation with the relevant DPKO mission authorities, and the mission in the field. The bidding for, and the award of, a contract are on an international basis. Variations may occur since national contingents may have special uplift requirements. The exact terms and conditions shall be clearly defined in the relevant Charter Agreement between the carrier and the UN.

Military assistance. The acquisition of military aircraft is usually a result of consultation between officials of the government concerned and of the UN to provide airlift capacity for a specific purpose. These are followed by a Letter of Assist issued by the Director of the OMS. Such a Letter of Assist usually specifies in detail the Organization's exact requirements with the related duties and obligations of the parties involved. The Letter of Assist is the equivalent of the Standard Aircraft Charter Agreement between the Organization and commercial carriers providing aircraft for a mission.



Finnish peacekeeping forces arrive in Namibia aboard a C-5A Galaxy transport aircraft supplied by the United States of America (1989). (UN Photo #157214C)

- **Short-term use.** The use of military aircraft supplied by a government on a short-term basis is usually for a specific task of limited duration.
- **Long-term use.** When aircraft are provided on a long-term basis, they are usually accompanied by a national contingent for their operation, maintenance and upkeep. Such a national contingent shall arrive in the mission entirely self-sufficient in group support equipment, vehicles and trailers, tentage, generators, refrigerators, communications equipment and other stores. The contingent and its personnel, vehicles and equipment shall form part of the mission under the existing rules and regulations and the "Aide Memoire for Troop-Contributing Countries." Once the contingent is established in the mission all requests for supplies and equipment, with

the exception of spare parts for the aircraft, shall be routed through mission headquarters in accordance with UN procedures.

Aircraft Painting and Marking

- **Short-term use aircraft.** Any aircraft provided for a short term may retain its national registration and related markings. The aircraft will not be painted white, unless otherwise agreed between the UN and the government or commercial carrier.
- **Long-term use aircraft.** For flight movements related to positioning or de-positioning an aircraft and its crew into the mission area, the responsibility for obtaining required clearances and permits rests with the contributing nation or carrier and will be done by them following their national procedures. This regulation will also apply for national support flights. If necessary, the UN Organization will assist, on request, in obtaining any required clearances.

6.4 Transport of Passengers and Cargo

Procedures. Chief Movement Control Officer (CMCO). The CMCO or his authorized representative shall designate the passengers and cargo to be carried in an aircraft in the service of the UN. In a mission with a large number of troops this responsibility is normally entrusted to the CMCO. The CAO is responsible for issuing the appropriate administrative instruction concerning the use of the aircraft and restrictions on passengers authorized to travel on them, in order to avoid any undue financial liability for the Organization.

Priorities. The priorities will be determined depending on the situation in the theatre or mission area. Normal priorities are:

- deployment and operational movement or direct operational support;
- food and medical supplies;
- other essential supplies;
- communications;
- duty travel and non-essential supplies; and
- leave and welfare goods.

In the mission area, UN flights operating on transport or movement missions are divided into scheduled flights and special flights (unscheduled flights), the latter which are flights programmed for a specific mission. Requests for special flights are scheduled through the same channels as scheduled flights. However, total available flight hours will be limited and only the most urgent requests will normally be met.

The cargo transported by air is defined as follows:

- **Regular Cargo.** Cargo to be moved within a required time frame either on Scheduled or Special Flights.
- **Free Flow Cargo.** Cargo with a relatively low priority which will be transported on a space available basis. Cargo requiring special treatment and special care may not move as Free Flow Cargo.
- **Dangerous Goods.** For the commitment of an aircraft to the transport of dangerous goods, the AOCC shall ensure commercial aircraft have been approved for this kind of transport and the operator is certified by the responsible Civil Aviation Authority. Also, the crews must be trained on this matter regularly.

Special Flights

Welfare flights may be undertaken using the aircraft in service of the UN on condition that:

- the aircraft is not otherwise required for operational duties;
- all costs are paid by the individual participating in the flights; and
- prior approval has been obtained from OMS.

National support flights. A number of national governments provide their contingents with regular support flights carrying passengers, mail and cargo from the home countries to the missions and vice-versa, or even in the mission area. Such flights may be weekly, monthly or otherwise as required; they are at the expense of and at the full responsibility of the representative home governments. However on some occasions, with the approval of the governments concerned, it is in the interest of the Organization to use such flights for the transport of UN cargo or passengers. Such use of airlift capacity may be either whole or partial, a reimbursement of the cost is normally prorated according to the capacity actually used.

6.5 Airfield Management

Requirements. All Air Operations require support infrastructure. These requirements will largely depend on the size of the operation and the type of aircraft used, such as helicopters, STOL fixed wing aircraft or long range type aircraft.

Air Traffic Control Service (ATC) is one of the most essential elements of airfield management. ATC personnel must be capable of using the English language and performing their basic duties as shown below. Under certain circumstances they may be required to execute additional duties.

- Control aircraft based on the International Civil Aviation Organization (ICAO) Rules and Recommendations. If differing from the ICAO Rules and Recommendations, they must set some priorities on the procedures concerning approach and landing.
- Confirm the required permissions, such as landing permits of incoming aircraft in service at the UN, with the national authority prior to the aircraft's arrival.

- Give serious attention to updating and verifying information and its timely delivery to aircrews both in the air and on ground. This is considered as extended Aeronautical Information Service (AIS).
- Control aircraft on the Movement Area in consultation with ground service units.
- Broadcast field weather conditions to incoming aircraft and weather forecast to outgoing aircraft.
- Support the necessary air to ground UN communications.

Ground Services

Emergency services. It is the normal responsibility of an airfield that a fire brigade is on post during the hours that the airfield is open for incoming and outgoing flights. Also a rescue team should be present to rescue the aircraft crew and passengers and to clear the landing strip in case of a unsuccessful aircraft landing.

Aircraft handling. In case of frequent airfield visits during a longer period of time, it is recommended that the operator arrange, in coordination with the airfield management, to station some of his own facilities at the airfield.

Passenger Handling. Passengers must report to the Movement Control Detachment (MCD) office at the airfield a minimum of one hour prior to the scheduled departure time for their flight, or their reservations are automatically cancelled. The MCD must ensure that all the passengers carried on an aircraft in service at the UN are in possession of valid immigration and customs documentation for the aircraft's destination and any stop en route. Also the passenger manifests will be issued by the MCD.

Regarding inter theatre flights (deployment/ rotations/redeployment), it is the responsibility of the CMCO to ensure that outgoing personnel and baggage are present at the airport at the agreed time and that the transport is available to carry incoming passengers and baggage to their destination. On cargo flights, depending on the kind of freight, passengers may not be permitted on board while dangerous cargo is carried. Also for safety reasons the pilot in command or aircraft commander may decide not to take passengers.

The Movement Control Unit (MCU) will operate one or more MCDs to control movements through airports, including freight movements. Daily transport plans are distributed to MCDs.

Customs and immigration. As a part of their duties, MCD operating at an airport will:

- maintain contact and liaison with police, customs, and other local authorities;
- contact the airport authorities to obtain permission to handle UN owned or chartered aircraft at a reserved area and to obtain access to the apron for UN vehicles; and
- contact the custom and immigration authorities to arrange for special clearing of passengers and cargo.

6.6 Maintenance

Reporting. To optimize the use of the provided aircraft, regular reporting between the AOCC and the operator regarding the serviceability of the aircraft and the planned flight program is required. These reports will enable the operator to plan the scheduled maintenance taking into account the planned flight program. It will also enable the AOCC to make a selection between the available aircraft.

Stand-by aircraft. In non-planned urgent flights such as SAR or MEDEVAC, the AOCC will direct the operator to maintain the desired aircraft on a stand-by position. The operator is responsible for the quick reaction of these aircraft.

6.7 Flight Safety

Flight safety relates to occurrences that definitively endangered the aircraft and its occupants or even the safe conduct of the flight. The term includes breakdown of aircraft facilities that could have led to an accident as well as firing upon the aircraft. The pilot in command or aircraft commander will report all incidents to UN authorities in addition to abiding by the governmental regulations of the nation from which the aircraft is registered.

Aircraft accident

Investigation. The organization and conduct of the investigation will be done in accordance with Annex 13 of the ICAO Rules and Recommendations. The State of Occurrence shall initiate an investigation into the circumstances of the accident. However it may delegate the whole or any part of the conducting of such an investigation to the State of Registry or the State of the Operator.

Action to be taken by UN. In the event of accident occurring in the mission area and involving an aircraft in the service of the UN, a Board of Inquiry will be convened by the Mission Headquarters.

LESSON 6
END-OF-LESSON QUIZ

1. List five types of aerial support missions.
 - 1)
 - 2)
 - 3)
 - 4)
 - 5)
2. For long term aircraft use, who is responsible for obtaining clearances and permits to position aircraft and their crew in the missions area?
 - a. the Office of Mission Support
 - b. the Contributing Nation
 - c. the Air Operations Control Centre
 - d. the Chief Movement Control Officer
 - e. the UN Organization
3. Rank the following items as per the normal priorities use for transporting personnel and cargo aircraft.
 - a. other essential supplies
 - b. food/medical supplies
 - c. leave/welfare goods
 - d. deployment/operational movement or direct operational support
 - e. communications
 - f. duty travel/non essential supplies
4. Which of the following defines Free Flow Cargo?
 - a. cargo requiring special treatment and special care
 - b. cargo with a relatively low priority which will be transported on a space available basis
 - c. cargo to be moved within a required time frame either on Scheduled or Special Flights
 - d. cargo requiring special aircraft certification
 - e. none of the above
5. Who has financial responsibility for national support flights?
 - a. the home Government
 - b. the UN Organization
 - c. the CAO
 - d. the Mission on a prorated basis according to the actual capacity used
 - e. the Chief Movement Control Officer

6. Who ensures that passengers using UN air services are in possession of valid immigration and customs documentation?
 - a. the Movement Control Unit
 - b. the Aircraft Commander
 - c. the Movement Control Detachment
 - d. the Host Nation Airport Authority
 - e. the Chief Movement Control Officer
7. Who arranges for the special clearance of baggage?
 - a. the Movement Control Unit
 - b. the Aircraft Commander
 - c. the Movement Control Detachment
 - d. the Host Nation Airport Authority
 - e. the Chief Movement Control Officer
8. Who is responsible for reporting all flight safety incidents to UN authorities?
 - a. the Air Traffic Controller
 - b. the Chief Movement Control Officer
 - c. the Air Operations Control Centre
 - d. the Aircraft Commander
 - e. the General Safety Officer
9. Who investigates aircraft accidents?
 - a. the State where the accident occurred
 - b. the State where the aircraft is registered
 - c. the State where the aircraft is operated from
 - d. the Mission Headquarters
 - e. all of the above
10. Who directs that operators maintain their aircraft in a stand-by position for quick reaction to urgent flights?
 - a. the Chief Operations Officer
 - b. the Air Operations Control Centre
 - c. the Chief Movement Control Officer
 - d. the Force Commander
 - e. the Head of Mission

**LESSON 6
ANSWER KEY**

1. There are 11 choices available at section 6.1, page 89
2. b. the Contributing Nation
3. In order of normal priority: d, b, a, e, f and c
4. b. cargo with a relatively low priority which will be transported on a space available basis
5. a. the home Government
6. c. the Movement Control Detachment
7. c. the Movement Control Detachment
8. d. the Aircraft Commander
9. a. the State where the accident occurred
10. b. the Air Operations Control Centre

This page intentionally left blank.



LESSON 7

MAINTENANCE

- 7.1 Maintenance Doctrine
- 7.2 Maintenance Systems
- 7.3 Maintenance Planning
- 7.4 Planning Guidelines and Responsibilities
- 7.5 User Maintenance
- 7.6 Request for Repair
- 7.7 Recovery Request
- 7.8 Inspection Policy and Procedures
- 7.9 Repair Parts Supply
- 7.10 Maintenance Policies
- 7.11 Local Contract - Repair and Spares

LESSON OBJECTIVES

This lesson will provide the student with an overview of the roles and responsibilities for equipment maintenance in a peacekeeping mission area. The lesson will discuss the United Nations maintenance concept and system and provide the student with some of the specifics of maintenance operations. Policies and programs like vehicle inspections, condemnation, salvage, and contracted services will also be explored.

By the end of Lesson 7, the student should be able to meet the following objectives:

- Understand the basic maintenance concepts and lines of support;
- Be familiar with basic mission maintenance organizations, their roles and responsibilities;
- Identify common maintenance services and who provides those services; and
- Understand the difference in maintenance support for contingents providing their own equipment under a Contribution MOU.

7.1 Maintenance Doctrine

While the specific maintenance system will be tailored for each UN Mission, an overview of general principles and a general concept of Maintenance is offered as guidance.

Maintenance Concept. The Maintenance system is organized into a number of lines of support, progressively better equipped and more comprehensive, able to undertake increasing depth of repair as measured by time and complexity.

Repair. Equipment and assemblies are moved through this system in a number of repair loops which extend from unit level to facilities in theatre.

Recovery. Normally recovery is aligned with lines of repair support, but recovery resources can be used to move equipment in any direction in addition to the pure extrication function. Control of recovery is therefore retained at formation and force level.

Spares. Timely availability of spares is critical to the Maintenance plan and the management of technical spares impinges at every level of maintenance activity. Where the flow of spares is interrupted or delayed, reclamation, cannibalization and salvage can play a part; but, because these activities can have long term effects on equipment status, they require careful consideration before institution and strict control once enacted.

Lines of Support. Equipment Maintenance will be performed at the lowest level consistent with availability of parts, tools, facilities, skills and time. On-site repairs should be exploited to the maximum. Unserviceable materiel which is beyond the maintenance capability of an organization will be reported and delivered to the next higher maintenance organization. Unserviceable equipment will be evaluated for repair at the lowest capable level. This can be achieved by a number of lines of support, each progressively better equipped and more comprehensive, but with the implication of being less easy to move and requiring engineering stability to be efficient. Within such a system, the repair priority of unserviceable equipment will be accomplished in accordance with the policy set out by the Force Commander. Lines of support are detailed as follows:

- **First Line.** The unit maintenance organization responsible for the daily maintenance of equipment. First Line maintenance organizations may also undertake Second Line maintenance. First Line support is provided by support integral to a unit, operating within the parent unit organization but under the technical control of the Mission Maintenance organization.
- **Second Line.** The maintenance organization responsible for providing support to specified First Line units and organizations. Second Line organizations may also undertake some Third Line maintenance. Second Line support is normally provided by an independent workshop or repair facility at force or formation level.
- **Third Line.** The maintenance organization other than First and Second Line repair units. These organizations, although able to undertake all depths of maintenance, normally undertake Third Line only. Static, Third Line organizations may include local, national or international industrial facilities providing support to the Mission under contract.

7.2 Maintenance Systems

An outline framework for Maintenance in the UN context is shown below. This shows the relationship between the Lines of Support and the UN Maintenance Organization. Equipment and assemblies are moved through the system in a series of repair loops which extend from unit level to facilities both in and out of theatre. At each Line of Support an increasing depth of repair is carried out. The illustrated concept does not attempt to be either complete or prescriptive, but illustrates the general way in which the principles of Maintenance can be implemented in a UN Mission. It is applicable to all levels of Missions, relevant to whichever logistic support concept may be adopted and adaptable to all types of equipment within the Mission. The integrity of the Maintenance concept must be observed if efficient and effective support is to be provided.

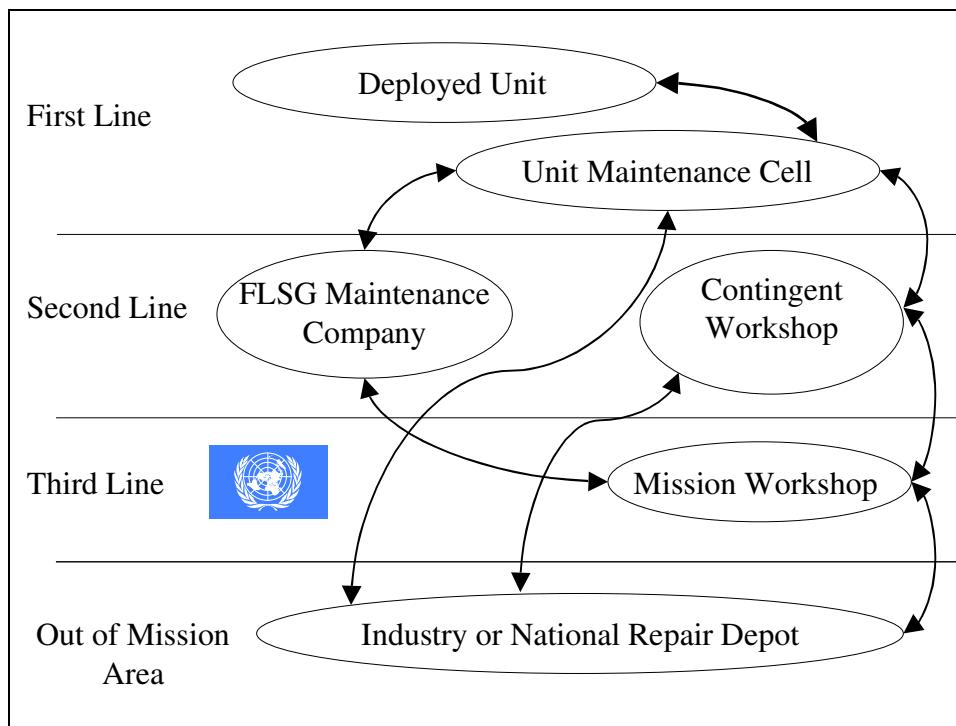


Figure 7-1

Recovery. Recovery must be sufficient and capable of providing support to armoured vehicles when deployed and capable of recovering and evacuating equipment within and between units and formations -- particularly when these are deployed over extended distances. Recovery support must be integrated with the lines of repair support, within a balance of immediacy, importance, deployment and location. The recovery system is linked to the lines of repair support. Recovery plans are made and recovery operations controlled at Force level.

Functional Control. The command and control of UN Maintenance in the Mission area is exercised by the CAO and the CLO. The bulk of maintenance in most missions is managed by military logistic staff. The integrated nature of maintenance activities and facilities, in particular the need to effectively and efficiently orchestrate the maintenance effort, make it necessary for

there to be a clear, functional control of the maintenance system. This embraces the authority of the maintenance staff, acting on behalf of the Force Commander, to direct the method of operation and manner of employment of the service units in order to achieve the common policy objective. Thus the C Maint O in the Mission will control policy, priorities, methods, equipment, specialized training, techniques and procedures to be employed by a unit carrying out its technical function.

Staff Relationships. The C Maint O will cooperate with the following staff members within the Mission Headquarters:

In the **Military Headquarters** the C Maint O will, through the Logistic Branch, work closely with:

- The Chief Operations Officer and his Plans Cell in all matters concerning acquisition of equipment with relation to operational matters, especially surveillance equipment and operational vehicles. The Chief Operations Officer will also give priorities for repair of this equipment.
- The Chief Signal Officer in matters of signal equipment and priorities of repair.

Within the **Logistic Branch** the C Maint O will work closely with:

- The Chief Military Transport Officer for transport matters.
- The Chief Engineer Officer for engineer equipment and construction of workshops.
- The Chief Medical Officer for medical instruments and other technical medical equipment.

Within the **Civilian Administration Branch** the Maintenance Officer will work closely with:

- The Chief Finance Officer for budget and finance matters.
- The Chief Procurement Officer for procurement and contract matters.
- The Chief Transport Officer for transport and its support matters.
- The Chief Communication Officer for communications and generators.

Responsibilities within the Maintenance Cell. The C Maint O will control a Maintenance Cell within the Force Headquarters to carry out maintenance. The size and organization of the Mission will determine the size and shape of the Cell.

7.3 Maintenance Planning

General. Participating states may be asked to perform a logistic reconnaissance. This will refine national maintenance requirements and contribute to the development of the Guidelines to Troop Contributing Countries prior to deployment into the mission area. It will also aid in establishing the time for which each contributing state will be required to be self-supporting and when local or international contracts for maintenance support of the mission will take place.

The following maintenance support parameters will be adhered to by the contributing states:

- Units are to deploy with integral First Line and, where appropriate for specialist equipment, Second Line repair and recovery support. DPKO may ask one or more troop contributing states to establish a Second Line and limited Third Line maintenance organization (workshop) based on the maintenance planning carried out earlier. Host Nation maintenance resources, civil and military, will be incorporated in the UN Maintenance concept and organization to augment Mission Second or Third Line maintenance resources through local contracts for civilian support and Memorandum of Understanding (MOU) with governments for military resources.
- Spares. Units are to deploy with sufficient spare parts for their vehicles and equipment so as to last as required by Troop Contributor Guidelines. Units will also bring First and Second Line repair parts for their vehicles and equipment, based on national stocking criteria so as to last as required by Troop Contributor Guidelines. The subject of spares accounting, provision, scaling and reimbursement are covered elsewhere.

Deployment Phase. This phase begins with the actual deployment of national contingents and UN personnel including Second Line maintenance workshops by the designated contributing nations.

Arrival Inspection. Serviceability inspections will be conducted for when equipment arrives in the mission area to satisfy contribution agreement or contractual requirements. Equipment that is not serviceable must be repaired by the contributing country or contractor. Unserviceability as a result of transportation problems may be effected by the UN if it was responsible for transporting the equipment.

Sustainment Phase. Initially, larger missions will rely heavily on military based maintenance support upon deployment and then gradually make a transition to civilian and contractor support when it is acceptable and cost effective to do so. Small missions, not requiring military maintenance support, will generally be dependent upon civilian or contract support commencing from the time of arrival in the mission area. The sustainment phase begins as soon as these civilian or contractual arrangements are put in place. The purpose of these arrangements is to sustain the mission for the period of the UN mandate. However, the continued involvement of the military maintenance structure will be required during this phase depending on the specific mandate and feasibility to implement civilian and contractor support.

Operational Inspection. Periodically, operational inspection will be conducted during the mission to ensure that contingents are meeting the standards set forth in the Contribution MOU. Scheduling and notification will be provided to contingents as directed by the CAO.

Redeployment Phase. Prior to the completion of the mandate, redeployment planning will be conducted in order to phase out the operation. This planning is usually in greater detail than that for the deployment phase. The redeployment phase is conducted in three parts: stores drawdown planning, out-survey procedures and transportation planning. During stores

drawdown planning spare inventory levels are reduced as requirements decline so as to minimize redeployment or disposal costs.

Departure Inspection. An inspection will be conducted to ascertain the serviceability of equipment before shipment back to contributing nation or contractor. Details of the inspection are to be included in contingent redeployment plans.

7.4 Planning Guidelines and Responsibilities

Maintenance Guidelines. In the mission area there must be all the facilities necessary for the maintenance of all vehicles and technical equipment, excluding aircraft, with which the units are equipped. Repair techniques and maintenance methods must be available to meet this task, even if they are concentrated in a single workshop. The maintenance activities can be executed, depending on the depth of repair, at:

- **First Line Workshop:** (daily maintenance) a short distance between unit and workshop is important but must be balanced with a suitable workshop location.
- **Second or Third Line Workshop:** to achieve the target of an availability of 85% or more, it is of critical importance to start the maintenance as soon as possible, but also as economically as possible. This could result in centralization of maintenance for specific equipment, but with corresponding increases in repair time.
- **Third Line Workshop:** If the materiel is beyond the repair capacity or capability of the maintenance facilities within the Mission, it must be decided whether the materiel is to be condemned, evacuated to the providing country or whether it should be sent to a contractor or industry.

Normally maintenance should be executed in those workshops in which all the required engineering resources are available.

Planning Responsibilities for Maintenance

Chief Maintenance Officer. The Chief Maintenance Officer is responsible for:

- Determining which maintenance facilities are required;
- Determining whether the required engineering resources are available, even if only in a single workshop in terms of tradesmen, spares, tools, equipment and special facilities;
- Matching the deployment plan for workshop with the deployment plans for the supported units;
- Coordinating the work of the different workshop and local contractors, monitoring workload and recommending re-distribution of work or dependency changes as necessary;
- Planning the stockpiling of spares;

- Allocating the repairs priorities according to the guidelines given by the Force Commander;
- Planning the budget for use of local contractor;
- Planning instructions and directives to the users;
- Planning the recovery and evacuation system; and
- Formulating policy for the cannibalization of equipment and salvage of spares;

Note: The C Maint O is the principal advisor to the Force Commander concerning maintenance. He should seek a high level of interoperability between the workshop and units; as well as a high level of equipment standardization.

7.5 User Maintenance

Preventive Maintenance is the systematic care, inspection and servicing of a vehicle and equipment so as to maintain it in a serviceable condition and prevent breakdown or damages and minor defects from developing into major repair jobs.

Scheduled Maintenance is predetermined servicing to take place at fixed mileage or time intervals in order to maintain the vehicles and equipment serviceability.

Responsibilities

Unit Maintenance Officer is responsible for devising a system of preventive and periodic maintenance of all unit vehicles and equipment and ensuring its effective implementation through a system of "Unit Maintenance Record" for each vehicle and piece of equipment held on charge.

Operator Preventive Maintenance. The operator is responsible for carrying out the checks as laid down in user handbook or guide before, during and after use. Daily maintenance service before, during and after operation for other technical equipment, such as electric generators, engineer machines and equipment, observation and surveillance equipment as well as signal and communication equipment, should be performed in accordance with "Technical Manuals" for the specific equipment.

Monthly Preventive Maintenance Service

This maintenance will be carried out for each vehicle and piece of equipment held on charge of the unit once every month (a schedule of 30 days preventive maintenance for all vehicles and equipment held on charge should be made) by the unit in coordination with First Line workshop. This should include checking, adjusting and servicing or cleaning vehicles and equipment and its major assemblies and components. Technical Manuals for vehicles and equipment should be referred to when making the detailed monthly maintenance checklist.

The service will be recorded in a vehicle or equipment maintenance record and an individual vehicle or equipment log book. This will be checked by the UN inspection team during Annual Technical Inspection.

Scheduled Periodic Maintenance

Vehicles. The scheduled maintenance for vehicles and equipment is to be carried out by a unit's own First Line workshop as per the appropriate vehicle or equipment manual. Necessary expert assistance may be requested from the UN Second Line maintenance workshops.

Other Equipment. All scheduled maintenance will be recorded in an individual vehicle or equipment maintenance record or log book. This will be checked by the UN inspection team during Annual Technical Inspection.

7.6 Request for Repair

The Repair Request is the means by which a demand is made by a Unit or Maintenance Organization for the repair of equipment which is beyond their own capability. The equipment covered by this procedure excludes infrastructure, accommodation and utilities.

Request Procedure. The Repair Request is normally submitted to the next line of support within the Maintenance Organization. In exceptional cases the Request may be submitted to the Maintenance Cell responsible for the command and control of the Maintenance Organization. The request may be made in writing, by combat net radio or area communications, by telephone or fax.

Response to Repair Request. The Maintenance Organization's response will be to:

- Dispatch a repair team;
- Dispatch Recovery;
- Call the Equipment into the designated Workshop; and
- Arrange for Local Contract services.

The owning unit is responsible for the condition of equipment prepared for repair such as removal of loose items, cleanliness.

For miscellaneous equipment, the owning unit is to ensure that no damage is caused in transit. Suitable packaging is to be used, and the item should be securely labelled for identification purposes.

7.7 Recovery Request

Responsibility. It is primarily a unit responsibility to recover or to lift its own vehicles and equipment. If the recovery is beyond unit capacity, the C Maint O will allocate Second Line recovery responsibilities, normally by area.

Normally the recovery is performed to the contingent location where the vehicle can be repaired. If recovery has to be carried out to a temporary location, the owner unit will arrange further recovery or evacuation to unit location or workshop as applicable.

Recovery Priorities. The priorities are:

- Recovery necessary to prevent injuries or death to personnel;
- Recovery involving need for medical assistance and/or fire fighting equipment;
- Accident or breakdown of vehicles carrying perishable or explosive freight;
- Recovery needed to clear blocked roads; then
- All other situations.

Recovery Procedure. The request for recovery support will be forwarded by the user (driver, unit or convoy commander) utilizing the means of communication most suitable and readily available (radio, telephone, passing traffic). The request should be submitted directly **to the unit responsible** for the vehicle.

The recovery request must contain, as accurately as possible, all information which is necessary to perform the recovery. Personnel should remain at location of recovery and not leave recovery object unattended until recovery party arrives.

Unit Action. Upon receipt of the request the unit will, in the priority order, decide if it is able to undertake the task. If the unit is **able** to undertake the task, it will, if possible, submit the necessary information back to the requisitioner. If the unit is **unable** to undertake the task, they will request the recovery support unit to do it.

After recovery has been completed the recovery task will be recorded, including information on damages inflicted during the recovery operation and any tools or equipment not removed from the object prior to recovery. If the designated recovery unit is unable to carry out the recovery task, it will forward the request to C Maint O for further action.

7.8 Inspection Policy and Procedures

General. The purpose of the inspection is to verify that the unit's equipment management program is adequate and that maintenance is being performed correctly as well as to identify specific problems with individual vehicles or equipment.

The frequency of inspections for vehicles and equipment is once per year. The frequency may be increased by C Maint O or Mission HQ to meet special circumstances. All inspections will be carried out by an inspection team designated and controlled by C Maint O.

Inspection Responsibilities

Unit Inspection. The unit is responsible for the checks on all vehicles and equipment. The Commanding Officer will arrange for a monthly inspection of all vehicles and equipment on unit charge. This should be a formal parade of all vehicles and equipment and will include an inspection of procedures and the condition of unit garage facilities, as a means of assessing and improving the efficiency of the unit's vehicle and equipment maintenance.

Operational Inspection (OI). This is a technical inspection of unit vehicles and equipment and is normally performed by a Joint Inspection Team to be designated, coordinated and instructed by C Maint O once a year to determine the serviceability of the equipment and ensure that unit procedures are working properly.

C Maint O will notify Units or HQs holding vehicles and equipment with sufficient advance notice to ensure that the vehicles and equipment can be made available for OI with minimum interference to operational commitments.

The inspection team will note in their inspection report those items which require corrective action. The report will be made in 3 copies, one copy each to unit, inspection team/office and C Maint O. The unit concerned will ensure that corrective action is taken. The unit will also make arrangements for repair of vehicles or equipment beyond unit or First Line workshop capability. If the inspection team finds that a vehicle has serious faults or defects, then the vehicle will not be driven before these are rectified.

When the inspection has been completed, the officer-in-charge of the inspection team will report verbally to the unit commander. A written report will be made with one copy to the unit commander, two copies to C Maint O and one copy held by the repairing facility. The Unit must be prepared to discuss specific maintenance deficiencies or problems with the Inspection Team such as spare parts availability, repair requests outstanding, lack of tools, manuals, etc., and the status of corrective action which has been taken to resolve these problems.

C Maint O will prepare a post inspection report detailing the overall results of inspection and specific actions which are required. Units and HQs concerned will be required to confirm within a given period that corrective action has been taken.

7.9 Repair Parts Supply

General. For equipment and vehicles provided under a Contribution MOU (**Wet Lease** option), the provisioning of spare parts is included in the monthly rate paid per type of equipment. Contingents are also responsible for the transport of spare parts to the mission area

under a wet lease agreement. The Operational Support Manual currently does not cover support through Contribution MOUs

For **Dry Lease** agreements (parts provided by the UN) , repair parts demands may be submitted to the Mission Headquarters for action. Demands for repair parts may be Routine or Immediate Operational Requirement (IOR). Routine includes normal stock replenishment or stock creation. They may be satisfied through normal UN channels of supply, local purchase or through national governments through Letter of Assist (LOA).

Repair Parts Demands. Various types of repair demands are as follows:

- **Routine.** Routine demands may be normal, stock replenishment, stock creation, for spare parts or for tools or workshop equipment.
- **Immediate Operational Requirement (IOR).** IORs are submitted on the same form as Routine Demands and processed in a similar manner except that the highest priority is attached to their issue or procurement action. The IOR demand system must only be used to ensure uninterrupted performance of an assigned operational mission or task and other functions, such as communications, ambulance, etc. Only Authorized officers can initiate such demands.
- **Letter of Assist (LOA) Demands.** Where special essential items peculiar to a contingent are not available from normal sources of supply, and the contributing government is the only logical source of supply, arrangements shall be made by the CAO for the requisition to be processed through the OMS under the "Letter of Assist" program with the government concerned.
- **Local Purchase.** The various demands may be met through local purchase procedures specified in the Mission Logistic Directives.

7.10 Maintenance Policies

Condemnation policy and procedures. All non-consumable materiel and equipment must be processed in accordance with these procedures, in order to obtain authority to remove it from contingent and UN Mission inventories. This policy applies to Contribution MOUs as contingents are not permitted to unilaterally dispose of equipment in theatre. However , some of the common policy will not apply as replacement is the responsibility of the Contributing country and not the UN. Exceptions procedures, such a battle damage, should be clarified with the Mission Headquarters on arrival in the mission area.

The condemnation process provides the technical assessment to enable the UN Mission Property Survey Board to direct the deletion and disposal of equipment from property records. The process does not apply to the disposition of lost equipment or materiel which is to be processed in accordance with Chapter 2 of the Operational Support Manual.

The high cost of vehicles and technical equipment require that every effort be made to derive the maximum use from equipment prior to disposal action. Equipment and vehicles will not be considered for condemnation provided that they are still essential, still meet the operational requirement, and can be economically maintained.

In the case of vehicles, condemnation and disposal action is based upon age and mileage criteria for various categories of vehicles which will be determined for each Mission. Vehicles will not automatically be proposed for condemnation action by reason of reaching the established age and mileage criteria. In many cases the service life of vehicles may be extended beyond their scheduled replacement date provided that they are in good condition and that they can be economically maintained. The decision to retain vehicles in use beyond their scheduled replacement dates will be made by the Chief Transport Officer (CTO). The C Maint O will, on behalf of the Mission HQ, process all condemnation of vehicles, technical equipment, assemblies and spare parts maintained and budgeted for by the C Maint O in accordance with the procedures outlined.

The initiation of condemnation action is the responsibility of the Maintenance organization at the appropriate line of support, in conjunction with the owning unit.

Technical Authorities for Condemnation. All proposals for condemnation action must be supported by a technical assessment and recommendation from the C Maint O who has responsibility for the maintenance of vehicles and equipment in the Mission.

Condemnation Criteria. The following criteria will be considered:

- cost of repair (including parts, labor and shipping costs of parts);
- accumulated cost of previous repairs, when available;
- original purchase price when available;
- present value;
- availability and cost of replacement items;
- obsolescence;
- UN Mission standardization policy;
- availability of repair parts and materiel;
- kilometres driven, hours of operation, or an estimate thereof, if not available; and
- year of manufacture.

Condemnation and Disposal Action Procedure. Once it has been decided that condemnation is necessary, the Maintenance unit will raise a Provisional Condemnation Certificate (PCC). Vehicles and equipment for which PCC action has been initiated will not be subsequently used or operated; nor will items be salvaged without authority of C Maint O. Copies of the PCC are then to be sent to the C Maint O who will check that all the information required for a condemnation decision has been provided, make the maintenance recommendation and forward the PCC to the UN Mission Property Survey Board.

The PSB will make a decision as to condemnation, inform the Inventory unit and return the PCC, with the decision added, to C Maint O. The C Maint O will retain necessary copies of the PCC for the record and return the completed PCC to the Unit.

Units will issue the condemned vehicle or equipment to the designated Maintenance or Supply unit for salvage or disposal as necessary, remove it from the unit inventory and demand, if applicable, a replacement item through normal channels.

Cannibalization, salvage and reclamation, salvage and reclamation policy. Where the flow of spare parts is interrupted or delayed, the removal of useable spare parts, or "Cannibalization," to overcome the shortage is both tempting and common practice. Such a process has a part to play in the overall Maintenance effort, but because this activity can have long term effects on equipment status it requires careful consideration before institution and strict control once enacted.

The Salvage of spare parts from vehicles or equipment that have been condemned is a useful source of resources. Again this activity needs to be closely controlled. Clearly there can be difficulties in determining whether an item is serviceable or not, particularly for technically complex assemblies. Under these circumstances, special tools and test equipment may be necessary both to remove an item and to test it; this requires the resources of the maintenance organizations. A repair decision will then be necessary if reclamation is to be implemented.

Authorization. Cannibalization and Salvage by Units for UN Owned Equipment is prohibited. Cannibalization will only be allowed by Maintenance Units on the specific authorization of the C Maint O.

Salvage will only be carried out by Maintenance Units on the specific authorization of the C Maint O, normally only after the equipment has been condemned, following the decision of the Property Survey Board. The C Maint O will obtain authority for Salvage as part of the condemnation process.

Request for Salvage Before PSB Decision. If Salvage is considered necessary before the receipt of the Property Board Decision, an application will be submitted to the C Maint O. When a vehicle or item has been condemned and the PSB's decision has been received, authorization for Salvage will be given in writing by the C Maint O. The authorized Maintenance Unit will be responsible for reducing the vehicle or item to salvaged items, parts or assemblies, or scrap.

Salvaged items will then be assessed as serviceable or unserviceable. Those unserviceable, but which are required, will be assessed for Reclamation. Serviceable items will be returned to the Stores Organizations and taken onto charge.

Scrap will be Stored in a controlled area to await disposal instructions from the PSB investigation unit. Disposal will be reported to the C Maint O.

UN Maintenance Brief. It is recommended that personnel at maintenance management level are given a UN maintenance brief shortly after arrival to the mission area. This brief can be a part of a Logistic brief. The brief might include:

- UN Maintenance system, regulations and procedures;
- A presentation by the Maintenance Cell, including areas of responsibility; and
- The present maintenance situation within the mission, concerning:
 - Second Line maintenance units and location;
 - the present vehicle or equipment situation and holdings;
 - the Vehicle Establishment; and
 - the maintenance part of the budget.

7.11 Local Contract - Repair and Spares

General. These procedures shall apply to the procurement of all types of repair services on local contract. The control agency for all contract agreement will be the UN Force Headquarters. The designated Workshop Office will on behalf of the Chief Maintenance Officer (C Maint O) provide quality control and be the certifying agent for all contracts. Under no circumstances will the Workshop Office make a commitment for contracts without prior approval of the C Maint O and the Chief Procurement Officer (CPO).

Petty Cash. Petty cash funds for this purpose can be authorized by Force HQ and held accounted for by the Workshop Office. Petty cash funds can normally be opened up to the maximum level of US\$300.00 or the equivalent in local currency. Funds in excess of this must be approved by Headquarters, New York. Disbursement from the petty cash fund for individual items of expenditures must be limited to a maximum of US\$50.00 or its equivalent in local currency.

Repairs under Warranty. The CTO is responsible for all repairs under warranty for UN Owned Equipment (UNOE), such as vehicles and technical equipment, starting with disembarkation at the Port of Entry, and for Contingent Owned Equipment (COE) under a dry lease arrangement. Under a wet lease arrangement, the Contingent Commanding Officer is responsible for all COE warranty repairs, but may coordinate efforts with the C Maint O on a cost-share basis.

LESSON 7
END-OF-LESSON QUIZ

1. How many lines of support are there in the United Nations Maintenance system?
 - a. one
 - b. two
 - c. three
 - d. four
 - e. five

2. Which of the lines of support is generally static?
 - a. First
 - b. Second
 - c. Third
 - d. Fourth
 - e. Fifth

3. At what level are recovery plans made and recovery operations controlled?
 - a. unit
 - b. contingent
 - c. Force
 - d. Mission
 - e. UN Headquarters

4. The length of time for initial spare parts self-sufficiency on deployment to the mission area can be found in which of the following documents.
 - a. Mission Logistics Directives
 - b. The Guidelines to Troop Contributing Countries
 - c. the Operational Support Manual
 - d. the Contribution Memorandum of Understanding (MOU)
 - e. none of the above

5. What is the purpose of the Operational Inspection?
 - a. to ensure units are following UN maintenance procedures
 - b. to determine suitability of unit maintenance procedures
 - c. to determine the operational capability of a unit
 - d. to ensure that contingents are meeting the standards set forth in the Contribution MOU
 - e. all of the above

6. What is the UN target percentage for availability of equipment and vehicles?
 - a. 50%
 - b. 75%
 - c. 85%
 - d. 95%
 - e. 100%
7. Who is responsible for the daily maintenance of equipment and vehicles?
 - a. the Operator
 - b. the Supervisor
 - c. the Unit Maintenance Officer
 - d. the Unit Commanding Officer
 - e. the Chief Maintenance Officer
8. How often should preventive maintenance be carried out for vehicles?
 - a. daily
 - b. weekly
 - c. monthly
 - d. semi-annually
 - e. annually
9. Rank the following in their order of recovery request priority.
 - a. Recovery needed to clear blocked roads.
 - b. Recovery involving need for medical assistance and/or fire fighting equipment.
 - c. Accident or breakdown of vehicles carrying perishable or explosive freight.
 - d. Recovery necessary to prevent injuries or death to personnel.
 - e. All other situations.
10. Where should a user submit a recovery request?
 - a. to his parent unit
 - b. to the unit responsible for the vehicle
 - c. to the Maintenance cell
 - d. to the closest unit
 - e. to the Chief Maintenance Officer

**LESSON 7
ANSWER KEY**

1. c. three
2. c. third
3. c. Force level
4. b. the Guidelines to Troop Contributing Countries
5. d. To ensure the contingent is meeting the standard set forth in the Contribution MOU
6. c. 85%
7. a. the operator
8. c. monthly
9. In order of priority: d, b, c, a, e
10. b. the unit responsible for the vehicle



LESSON 8

MEDICAL

- 8.1 Introduction
- 8.2 Operational Medical Support Precepts and Principles
- 8.3 Medical Support Concept
- 8.4 Medical Support Planning Process
- 8.5 Medical Support Policies and Procedures

LESSON OBJECTIVES

Lesson 8 covers the provision of medical support to United Nations operations. This lesson will familiarize the student with the provision of medical services in a peacekeeping mission area. The lesson will cover the guiding principles and concepts behind medical support services and look at the overall planning process. The lesson will provide current United Nations policies and procedures regarding medical support services and show the general health services responsibilities of the Organization and Troop-contributing countries.

By the end of Lesson 8, the student should be able to meet the following objectives:

- Understand the basic medical precepts, concepts and levels of support;
- Be familiar with basic mission medical organizations, their roles and responsibilities; and
- Identify common Medical services and who provides those services.

8.1 Introduction

UN operations are complicated by a number of peculiar characteristics which impact fundamentally upon the provision of medical support. Medical support plans must be purpose-built for each operation, meet the demands of geographic, individual national needs, different national medical standards, language and communication difficulties. Plans must be capable of speedy initial reaction and flexible enough to manage rapidly changing operational demands. UN medical support planning and management of operational medical support must be acceptable to UN HQ and to participating nations as well.

8.2 Operational Medical Support Precepts and Principles

While the general logistic support precepts apply equally to medical support, medical staffs face unique problems affecting the health of UN personnel deployed on operations. The overall objective of medical support is the conservation of manpower, preservation of life and the limitation of residual physical and mental disabilities. Operational medical support therefore requires clearly defined and distinctive guidance.

UN Medical Precepts. UN medical support will comply with the following precepts:

- International Conventions for the Treatment of the Sick and Wounded. Medical support for UN operations will comply with rules laid down under the Geneva Conventions. In circumstances where the provisions of the Conventions are not directly applicable, the standards set out therein will be the minimum acceptable level of treatment.
- Entitlement to Medical Care. All persons, entitled under the terms of the Geneva Conventions, shall, without discrimination, receive medical treatment on the basis of their clinical needs and the availability of medical resources.
- Standards of Medical Support. Operational medical support to UN forces must meet standards that are acceptable to all participating nations. The aim must be to provide a standard of medical care as close as possible to prevailing peacetime medical criteria.
- Maintenance of Health and the Prevention of Disease. Medical support plans must include detailed measures for the prevention and control of disease and non-battle injury to deployed UN forces.
- Establishment of Medical Risk. Medical resources must watch the assessed risk to the deployed forces, from disease, non-battle and combat injury. The estimation of risk and production of predicted casualty rates is the responsibility of UN operational staffs.
- Capability of Medical Support. The medical capability deployed in support of UN forces must be in balance with the force strength and the exposure to risk of disease, non-battle and combat injury. Medical resources must be capable from the outset of

an operation, of meeting the demands of predicted casualty rates and be designed to expand progressively as force strength and risk increase.

- Readiness, Availability and Flexibility. Medical resources and staff must be at least at the same state of readiness and availability as the forces they are to support. They must also have the flexibility to meet the demands of evolving operation scenarios.
- Levels of Medical Care. The four fundamental levels of medical care must be available to all UN forces, organized on a progressive basis:
 - First Aid.
 - Resuscitation and stabilization of vital functions.
 - Life and Limb saving surgery, including post-operative care.
 - Definitive treatment and rehabilitation.
- Provision of Life and Limb Saving Surgery. Modern medical protocols are predicated on the need to provide immediate advanced trauma life support, to stabilize a patient prior to transportation and to provide life and limb saving surgery as soon as possible, normally no longer than six hours after injury.
- Continuity of Care. Patients moving through the levels of medical care must be given treatment which is continuous, relevant and progressive. When a number of casualties occur simultaneously, they must be managed using the standard criteria for triage, in order of priority according to the urgency of clinical need for treatment.
- Interdependence of Evacuation and Treatment. The size and capability of medical treatment assets at intermediate levels will be determined by the operational environment, length of evacuation routes, type and availability of evacuation assets.
- Means of Evacuation and In-transit Care. The means of evacuation must be compatible with the need to sustain the patient during the journey. In-transit care must be available throughout evacuation.
- Fitness for Evacuation. Clinical condition will be the key criterion in determining the timing and means of evacuation.

UN Medical Support Principles. Nations retain ultimate accountability for the health of their forces but, on the assumption of authority, the UN Force Commander will share the responsibility for the health of assigned forces. To meet this requirement, the Force Commander needs appropriate medical staff. They shall plan and execute the medical support plan in accordance with the precepts laid down in the preceding paragraphs and the following policies:

- Medical Health Standards. In order to qualify for UN resource medical treatment, evacuation and where applicable, compensation for personal disability, national contingents and individuals allocated or contracted to UN operations must achieve the basic standards of individual health and physical fitness laid down by the UN medical policy staffs, prior to deployment.
- Contingency Planning. Planning for medical support must be part of contingency planning. Planning staff cells must include appropriate numbers of experienced

medical staff to undertake medical support planning, supported by an operational medical information system.

- Provision of Resources. Resources may be discharged in a number of ways, including agreements with other nations or the appropriate UN planning staffs and force commanders, or through contingent resources when troops are provided.
- Statement of Requirement. Medical support requirements are to be determined by the appropriate UN Force Commander in consultation with contributing nations and UN medical planning staff. Medical resources will be specified as those necessary to prevent and control disease and to collect, evacuate and treat casualties occurring at agreed daily rates.
- Levels of Support. Levels of medical support will be provided appropriate to a particular operation. Policy for national contributions, established by UN medical planning staffs, will generally be:
 - Level 1 - National Responsibility,
 - Level 2 - UN Responsibility,
 - Level 3 - UN Responsibility,
 - Level 4 - National Responsibility.
- Evacuation. Evacuation resources will be provided, appropriate to a particular operation. Overall evacuation policy, both intra-theatre and inter-theatre, will be established by UN medical planning staffs in concert with the operational, logistics staffs and contributing nations.
- National Structures. National medical systems of care and evacuation should be retained as much as possible; however, medical planners must seek to take advantage of economies of scale which may be achieved from multinational concepts such as Lead Nation Responsibilities, Role Specialization and Mutual Assistance.
- Treatment of Entitled UN Personnel. From the outset of an operation, UN HQ establishes a policy regarding the entitlement of UN non-military staffs and other authorized personnel in theatre and for all medical treatment other than emergency measures.
- Medical Liaison. Medical planning staffs are to ensure that methods are established to provide regular and efficient liaison between national contingents and theatre medical resources, particularly the monitoring of in-patients at Levels 2, 3 and 4, and for all intra-theatre and inter-theatre evacuation.
- Definitive Treatment. Provision of definitive treatment, so far as Level 4 treatment is requested, is a national responsibility and will generally be undertaken outside the theatre of operations.
- Medical Materiel Rates and Standards. National medical support contingents must deploy into theatre with a standard quantity of medical materiel, as lay down by UN medical planners. This will be based upon estimated consumption at UN predicted casualty rates. Nations must use medical materiel which meets internationally recognized quality standards for the treatment of non-National patients.

- Re-supply Policy. Policy and planning for the re-supply of medical materiel is a medical matter and is inter-related directly with patient treatment. Medical planning staff must aim to achieve as much standardization as possible and establish an effective means of auditing usage and repayment.

8.3 Medical Support Concept

Medical operational support must react rapidly and with flexibility. This concept must not be considered a template, but should act as a basis for planning and as a means of obtaining a coherent medical support structure, which can be applied by all contributing countries.

Medical Planning Responsibilities. The task of planning, executing and controlling operational medical support is complex and needs specific expertise; it must be delegated to a medically trained planning staff who must have an established organization of sufficient, experienced manpower, communications and information technology. Medical staffs in all Headquarters do not operate in isolation. There is a very close interface with the personnel, operational and logistics staffs to provide the operational basis for, and to resource and support, medical plans.

Medical Resources and Capabilities. The resources and capabilities required to meet the demands of the medical tasks can be fully described as seven functional elements demonstrated in this diagram.

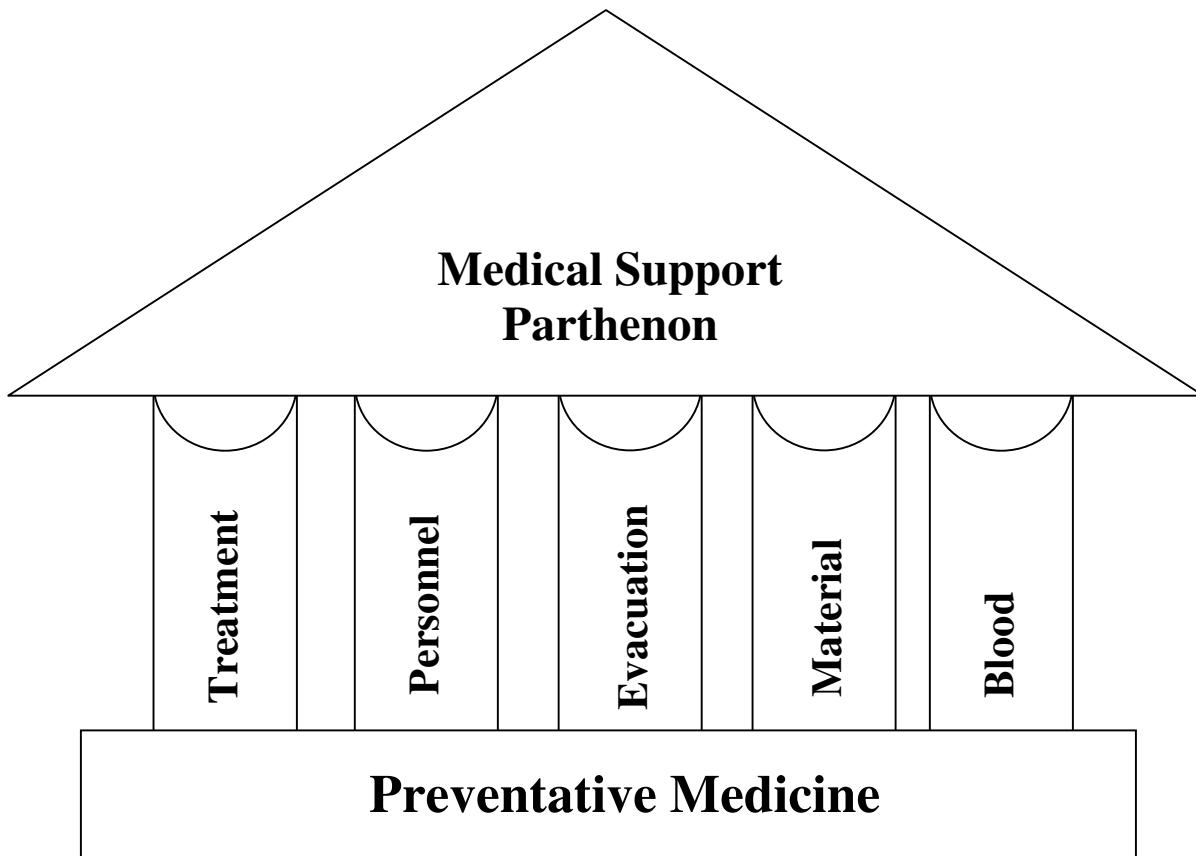


Figure 8-1

Command, Control, Communications and Information. A dedicated and structured medical C3I organization is the essential foundation of an efficient medical support concept. It begins before the operation is launched and will inter alia crucially depend on:

- Good reconnaissance information.
- Accurate, timely medical information system; inter-theatre between UN HQ NY and other headquarters/field headquarters (and vice versa), intra-theatre between CMedO and SMedOs.
- Careful selection and briefing of a suitable CMedO and national contingent SMedOs.
- Clearly established lines of accountability and control.
- Clearly understood policy directives and orders, issued promptly.
- Liaison at every level including Host Nation Support (HNS) and any Nongovernmental Organization (NGO) in theatre.
- Prompt and comprehensive after-action analysis of operational medical data, to provide a basis for future planning.

Preventive Medicine. In the majority of UN operations, the most likely risk to UN personnel will be from disease and non-battle injury. Medical support plans therefore must include provision for preventive medical measures and the means to implement them effectively.

- Identifying the risks and threats to the health of all UN personnel deployed in a specific theatre of operations, from terrain, climate, endemic disease and special environmental and occupation hazards.
- Identifying necessary preventive and controlling measures and advising commanders on their implementation; including the production of theatre policy on vaccination and prophylactics measures and the appropriate training of all personnel.
- Auditing and in some cases training and supervision of implemented measures. This will include gathering of epidemiological and other technical statistics and information.
- Advising commanders on the overall risks and threats and the limitations they may place on the operational plan; including estimating the rates of disease and non-battle injury that may result.

Treatment. The key in medical care is to achieve a balance between medical capability at each level and the ability to evacuate between them. Evacuation and treatment are integrally linked and should not be planned in isolation. Medical treatment at every level must be of a standard acceptable to all national contingents and UN employees. Over-resourcing or duplicating medical effort must be avoided.

Level 1: Level 1 medical support includes:

- Triage and immediate life saving measures and first aid;
- Implementation of disease, non-battle injury and combat stress preventive measures;
- Casualty collection;
- Routine sick calls and the management of the minor sick and injured; and
- Patient Reporting.

Level 2: Level 2 medical support is normally provided at formation level including:

- Evacuation from Level 1;
- Triage, resuscitation and stabilization of the seriously injured;
- Sustaining treatment of those sick and injured requiring further evacuation;
- Management of those minor sick and injured who can quickly RTD;
- Provision of additional support and reinforcement to Level 1 organizations as necessary; and
- Centralization of medical resources as appropriate. These might include dental support, hygiene support and medical re-supply.

Level 3: Level 3 medical support is normally provided at formation level and will be mission-dependant. It will usually be deployed in support of UN operations where relatively large numbers of personnel are involved and where Host Nation Support (HNS) resources are inadequate or inappropriate to meet the medical requirement.

Responsibility for the provision of Level 3 support lies with UN medical planning staff, who may utilize HNS hospitals, National and International or Lead Nation facilities, including hospital ships, Non-Governmental Organization (NGO) hospitals or a combination of all these.

The key medical precept, which dictates the location, capability and numbers of Level 3 units, is the need to ensure that a casualty receives Life and Limb Saving Surgery as soon as possible, normally no longer than six hours after injury. Principal Level 3 roles are:

- Evacuation from Levels 1 and 2;
- Triage, resuscitation and stabilization of the seriously injured prior to further evacuation;
- Life and Limb Saving Surgery of the injured who could not tolerate further evacuation without immediate treatment or for whom further evacuation would be problematic or inappropriate, i.e., detainees, refugees and other civilians;
- Stabilization for evacuation and where possible, diagnosis and treatment of those suffering from serious and life-threatening diseases;
- Diagnosis, treatment and holding of those sick and injured who can receive total treatment and RTD within the time-frame laid down by the CMedO.
- Patient Reporting;
- Medical re-supply to Levels 1, 2 and 3; and
- Centralization of formation-level medical capability as appropriate. These might include diagnostic resources, specialist surgical and medical capability, dentistry, stress reaction management and preventive medicine.

Level 4. In the context of UN operations, Level 4 resources provide definitive care of the injured and sick. This embraces specialist surgical and medical procedures, reconstruction, rehabilitation and convalescence.

Level 4 treatment is usually highly specialized, expensive, time consuming and of limited availability. It is therefore normally provided nationally, in the country of origin. Inter-theatre transfer is normally arranged by the UN and for reasons of financial, compensation, and pension, retains UN civilian administrative interest until care is complete. UN medical planning staff will organize Level 4:

- Where distance from theatre of operations to country of origin is excessive;
- When patient requires only short-term specialist treatment and is expected to RTD rapidly;
- Contributing nations are unable to provide appropriate definitive treatment;
- UN receives appropriate offer to provide definitive care from a specific nation; and
- Patient is a non-UN personnel and no acceptable Level 4 treatment facility exists. This is particularly important for the definitive care of detainees, Prisoners of War and refugees.

Personnel. The spectrum of personnel issues which impact upon or are generated by the medical support function is extremely wide. They emerge during the initial planning stages and continue long after an operation is finished. Consequently, the working relationship between medical and personnel staffs must be well developed and relevant personnel concerns detailed in

medical plans. The following paragraphs outline those issues which impact most obviously on the overall medical concept of operations.

- Medical Manpower. The size, shape and capability of medical organizations are dictated by the numbers and quality of individual personnel.
- Legal. Legal issues will concern both international and national law:
- Medical Information Management. The efficient management of medical information, particularly regarding patients, is a vital element of competent medical support planning. This information must be standardized and distributed rapidly to all who need it without violating medical professional confidentiality:
- Financial. Financial issues will impact on:
 - The size and scope of medical resources available;
 - Terms of Service, particularly pay, allowances, pensions, etc.;
 - Maintenance costs, particularly the provision of medical materiel, re-supply and evacuation; and
 - Final costs, particularly disability pensions and compensation for injury.
- Welfare and Spiritual. The general welfare of patients is an important element of medical care and therefore supports planning. Particular issues will be personal mail, contacting relatives, management of personal effects and most importantly, spiritual welfare. The latter could be a complex problem in a multinational operation. Religious and cultural customs may impact upon all aspects of medical care, for example, diet and feeding of patients.

Evacuation. The organization of treatment resources required in theatre will be determined by evacuation capability. The more problematic evacuation is between levels of care, the greater the treatment capability required at each. Key determinants in establishing a comprehensive and capable medical evacuation system are:

- Theatre Evacuation Policy. From the outset of an operation, a theatre evacuation policy must be established by the operational and medical planning staff working in concert with the Force Commander (FC) and CMedO. This policy will dictate the maximum length of time, normally expressed in days, a patient may be held at a particular Level of care. This in turn dictates the treatment capability required at each Level and the supporting Evacuation system necessary, both intra-theatre and inter-theatre.
- Fitness for Evacuation. Despite the discipline of an Evacuation policy, the clinical condition of a patient will be the key criterion when determining the timing and means of evacuation between Levels.
- Time to Life and Limb Saving Surgery. Evacuation must enable the stabilized patient to reach Life and Limb Saving Surgery as fast as possible and no longer than six hours, after injury.

Materiel. An efficient, well-regulated and cost-effective medical materiel logistics system is fundamental to UN medical support. The characteristics of medical materiel set it apart from other commodities and produce unique requirements:

- Medical stores are afforded protected status under the terms of the Geneva Conventions. It is necessary to store and distribute medical materiel separately for it to be considered protected.
- The complex interdependence between treatment capability and the availability of medical materiel gives medical logistics a key role in patient care management. It must be able to respond rapidly to urgent clinical demands.
- The highly technical nature of medical stores and their extensive national and international regulations, require tight controls and highly specialized management.
- The complexity of multinational UN operations generates a number of peculiar medical logistic difficulties which arise principally from:
 - A lack of commonality, and often compatibility, of national medical materiel, particularly drugs and consumables;
 - Disparity between national clinical treatment regimes; and
 - Lack of an established, standardized and coherent re-supply and accounting system.

A UN medical logistics system will be mission dependant and the resources designed to meet the needs. It must, however, have the following capabilities:

- Enable national contingents to be self-sufficient for the majority of commodities, from deployment and from a period of time specified by UN planning staff;
- Enable those elements providing centralized support such as hospitals, to be self-sufficient in the majority of commodities for the time specified by UN planning staff;
- Provide the user with a straight-forward and guaranteed demand system;
- Provide a theatre-wide supply system, capable of delivering rapidly;
- Establish a re-supply system equal to supply;
- Provide an audit system which is cost-effective, straight-forward and does not constrain demand or supply; and
- Supply of medical materiel to the theatre of operations will be established and coordinated by UN medical planning staff. The establishment of in-theatre demand and distribution systems will be the responsibility of the CMedO.

Blood. The supply of blood and blood products to multinational operations is a complex and sensitive issue, stemming from the wide disparity of standards between nations and the legal constraints incumbent upon some. Consequently, it is considered as a separate function from general medical logistics. The availability of blood and blood products is essential for the management of the seriously injured and sick. For the majority of UN operations this will require its provisioning at Level 3.

The minimum capability for an in-theatre system must be:

- Receiving liquid blood and blood components of a standard acceptable to all participating national contingents and individuals;
- Moving, storing and distributing blood and blood components in accordance with accepted international standards;
- Collecting, processing and testing blood on an as needed or an emergency basis; and
- All blood and blood products used in theatre must comply with internationally agreed standards. Where a particular nation cannot accept UN set standards, they must organize their own system of supply, at national expense.

8.4 Medical Support Planning Process

The disparate nature of UN operations dictate that a Medical Support Plan be purpose-built for each operation and that rarely will two plans be identical. Although every plan will differ, there must be a standard planning process which is progressive, comprehensive and understood at every level.

The characteristics of UN contingencies make it essential that outline planning is done rapidly, often with limited information and rarely with the benefit of reconnaissance. This planning may produce no more than an operational estimate. However, it must be sufficiently comprehensive and accurate to allow for a reasonable estimate of resources and particularly funding.

Mission Analysis. The first and most essential step in the medicine planning process is to have a clear understanding of the medical mission. The key issues in initial planning will be the need to access all available medical intelligence on the theatre of operations and deploy a properly briefed and competent medical representative on reconnaissance.

Medical Intelligence. Medical planning information must be comprehensive, rapidly available, accurate and most importantly, up to date. Ideally from a single source data base to provide information on:

- Geographic factors - Effects of climate and topography on general health.
- Endemic diseases - Types, prevalence, current prophylactics measures, resistant strains, treatment, etc.
- Special environmental and occupational hazards - Chemical/Biological warfare capabilities of protagonists, radiation hazards, road movement hazards, pollution, etc.
- Medical resources available in the theatre of operations (HNS) - transport for ambulances (air, land and maritime), treatment capability and standards at every Level of care.

HNS Capability. The availability of medical resources in the theatre of operations is a key issue in determining the size and capability of the medical organization the UN must establish. The more HNS available for UN use, the less has to be found from contributing nations. Overall HNS capability is assessed by a mixture of medical information analysis and reconnaissance, particularly of standards of medical care available, compared to UN and national contingent criteria. Resources required will include:

- Transport for ambulances (air, land and maritime), for both intra-theatre and inter-theatre evacuation;
- Treatment capability at every Level of care, but particularly at Level 3;
- Medical logistics support, including the provision of drugs and consumables; and
- Essential non-medical logistic support, including buildings, water, power, disposal of waste, communications, laundry, labor and other sources.

Alliance Capability. In planning medical support to the standards of contributing nations, every effort must be made to achieve economies of scale and effort. Maximum effort must be made to tailor medical support to the predicted demand. Some contingents may have an abundance of assets whilst others may lack all but the fundamentals. UN medical planners must aim to find a balance of capabilities. Often the most cost-effective means will be to organize for one nation to provide a particular function for all contingents, for example air MEDEVAC.

Policies. Two key policy issues are:

- **Prophylactics Policy.** This policy must be issued as early as possible, including vaccinations that must be taken by all individuals deploying into the theatre of operations. Instructions will cover measures to be taken prior to deployment, those to continue in theatre and post operations.
- **Evacuation Policy.** Theatre Evacuation Policy, known in some nations as Holding Policy, is the key to balancing the treatment capability available at each level of care, against the medical evacuation assets required. This is achieved stating the maximum period, in days, a patient may be held for medical treatment at each level of care. If a patient cannot return to duty within the specified time, they must be evacuated as soon as possible.

Medical Operational Concept. At a later stage in the planning process the medical concept of operations should be refined, particularly by input from the reconnaissance. It should now be clear how the medical staff intend to undertake the mission; the next stage is to decide on resources.

Medical operational concepts have to follow all factors of influence using the data accumulated from mission analysis, reconnaissance and policy decisions. Each of the seven functional areas of the "Medical Parthenon" should be examined permanently to decide the size and capability required of each function. All factors will, however, influence and be influenced by Medical operational support planning. Therefore constant auditing and permanent medical information is essential.

8.5 Medical Support Policies and Procedures

This section provides the policies and procedures which will lay out the inter-working relationships between UN Headquarter in New York, the Force Commander (FC), the Chief Medical Officer (CMedO) and the Senior Medical Officers (SMedOs) as clinical heads of their respective organizations.

Command, Control, Communications and Information (C3I). Within the C3I foundation are interrelationships and responsibilities which are important for all UN participants to understand.

- Capability. The medical C3I organization must be capable of planning, executing, controlling, supporting and auditing the full range of medical support functions. It must be capable of providing a seamless system of control of treatment, evacuation and passage of information from initial point of injury or sickness throughout evacuation to definitive treatment.
- Organization. Medical C3I must be so organized that each level of operational command has a Senior Medical Officer, directly accountable to the operational commander.
- The CMedOs must have the full range of equipment support for their task, including transport, communications and Information Technology.

Responsibilities. Medical Director UN, Medical Advisor DPKO, Chief Medical Officers and Senior Medical Officers must work closely together to guarantee continuously sufficient medical support in theatre.

Medical C3I Requirements. Although in UN Field Missions contributing countries may always have a final approval, the CMedO must have the necessary authority to implement, audit and communicate medical policies with each of the force contingents.

The CMedO is the head of the Medical Unit in Mission HQ and the Medical Advisor to the FC. The CMedO therefore must have direct access to the UN Force Commander. It is recommended that the CMedO should be selected from the national contingent providing the majority of medical forces.

CMedO should not be Chief of any other medical unit simultaneously.

To ensure an uninterrupted chain of responsibility in medical matters between the CMedO and national contingents, each national contingent with medical forces must have one designated chief medical representative as the Senior Medical Officer (SMedO). This individual has the clinical responsibility for all national medical matters and must be a physician.

Regular Medical Reports. Regular medical reports, statistical reporting and patient status reporting are an important element of medical support in UN operations. To advise the FC, the CMedO needs information about organizations, utilization of medical units participating, and of the health status of all personnel.

Other Medical Reports. Specific incidents that have resulted in, or are likely to result in, significant casualties, or other incidents of a medical nature which are likely to attract higher staff, public, political or media attention, such as assassination, mass casualties, infectious disease outbreak, food poisoning, etc., have to be reported immediately as "MEDICAL FLASH REPORTS."

Medical Communications. The success of medical support will rely heavily on effective communications. Compatible communications must be established between all medical elements to support rapid decisions such as medical evacuations and search and rescue. Medical personnel must be able to speak the requested language fluently. Interpreters, though, are an essential part of the medical provider's team for communication with foreign patients as well as between contingents of different nationalities.

There must be a dedicated medical communications network established, including a medical response element. CMedO is responsible to coordinate for an emergency medical frequency with the communications network administrators and the air service administrators.

CMedO, DOA/CAO and C Air Ops must coordinate action to ensure dedicated air MEDEVAC.

Each nation has a mandatory right to liaison with their national personnel when in a foreign medical facility but they do not have the right to medical supervision of the facilities medical personnel.

Preventive Medicine. Preventive medicine transcends each of the five medical pillars of medical support discussed above. It includes matters dealing with vaccinations and immunization as well as hygiene, including inspection, control, and advice on water and food, kitchen operations, camp facilities, garbage and waste disposal, sewage control as well as action against insects, vermin, rodents and stray animals. The medical threat must be fully evaluated prior to, during and following the UN operation.

Preventive health measures involve every individual in the operational theatre, who must be aware of necessary personal protective measures and trained accordingly. The organization to undertake them must therefore be in place from the outset and must extend from UN HQ down to the unit and below. Its shape and size will be mission dependant but will include, at least, individual advisors at every level of operational command.

It is a national responsibility at national expense to ensure personnel are prepared and appropriately trained in field preventive medicine measures prior to deployment to a UN operation. This must include the necessary vaccination and immunization. Although the country contributing forces to a UN mission ultimately must decide what vaccines should be given to its personnel, because the immune status of individuals varies from one country to another, failure to follow UN recommended policies on chemoprophylaxis and immunizations could result in denial of medical claims and compensation.

Once personnel are under UN command, the UN has responsibility for immunization and chemoprophylaxis sustainment. CMedO will adjust guidance as necessary during the conduct of an operation.

It is a national responsibility to maintain international standards in regards to the provisioning of food and water as well as the standards for sanitation, epidemiology and entomology. CMedO will inspect and audit national measures to ensure international standards are maintained in these areas.

Education of prevention of medical diseases typical for the deployment area is a national responsibility. Each UN participant must have basic training in measures to aid in the control of diseases and in the prevention of sexually transmitted diseases and HIV/AIDS.

In theatre food and water acquisition and handling is a responsibility of the Chief Logistics Officer. The CMedO will ensure medical expertise available to support the supply personnel in the acquisition and handling of foods.

Medical waste will be disposed of only in accordance with recognized international standards. Although disposal of medical waste is the responsibility of UN administration, CMedO/Force Hygiene Officers have to provide the necessary advice in methods and standards.

Treatment. Medical treatment of personnel is evidently one of the most important issues for the success of every UN mission and is usually defined as treatment at certain levels. Providers at each level must be capable and able to provide the medical care as described there. Certain medical principals applying to each level of medical care are listed below:

Common:

- Nations offering forces to UN operations must deploy the medical support that is integral to those formations.
- Medical units deploying to a Mission Area must carry an estimated initial medical supply, including consumables, for treatment during the first three months.
- National contingents must have a nominated, medically trained individual to be the Senior Medical Officer (SMedO), responsible to the Force Chief
- Medical Officer (CMedO) for the implementation of Force medical policy.
- Medical resources should be centralized as appropriate. These might include dental support, hygiene support and medical re-supply.
- Each Level of care must maintain a patient tracking and audit system and report to CMedO.
- All UN medical treatment facilities must be able to provide medical care for UN civilian personnel as well as military observers, UN civilian police and locally hired UN personnel. Military medical personnel therefore must be familiar with the treatment for civilians (women and children as well).
- All medical personnel and medical facilities with the potential of providing care to females, will be appropriately staffed, trained and equipped to provide adequate medical care.
- Dental support during UN operations normally will be planned for emergency and pain support therapy only.

- The capability to provide for psychiatric and stress control crisis intervention should be included, at the minimum at Level 3 facilities in each UN operation.
- Each level of care must have sufficient laboratory equipment. However, laboratory work up to Level 2 should be limited to routine work such as complete blood count, urinalysis and gram stains.
- Wherever the possibility and capability for blood transfusions are intended there must be the capability for pre-transfusion cross-matching.
- All patients must be in a stabilized condition prior to evacuation to other, or between, levels of care. The decision for suitability for transfer is a clinical decision and it and the arrangements for transfer will be the responsibility of the holding nation. Levels of care may be skipped if necessary and if the patient is stabilized to withstand the transport.

Level 1:

- Level 1 Treatment is a national responsibility. National contingents should deploy their own integral Level 1 medical support.
- National Contingents of battalion size, must be expected to deploy with the minimum of one medical officer, with supporting medical staff, medical stocks as laid down by the medical planning staff and to be self-sufficient in transport for unit evacuation.
- Medical capabilities and standards at Level 1 will vary considerably, depending upon mission and national resources. The minimum acceptable standard in addition to the capacities and capabilities is every individual to be capable of undertaking basic First Aid.
- Medical personnel must be able to treat patients for minor injuries and diseases and hold patients pending medical evacuation. They must be able to provide emergency medical care and to convey the casualty directly to the next level of care as necessary. This care must include beginning of intravenous fluids, control of haemorrhage, application of field dressings, administration of analgesics and establishment of an airway.
- Providers care must be as mobile as the forces they are supporting and they must be capable and able to provide the care prescribed at that Level.
- Minor units, numerically in numbers, should be supported by neighbouring units with a medical capability.
- Time and distance from point of injury to initial required surgery will be six hours or less.

Level 2:

- Whether Level 2 medical care will be with a nation or will be organized by UN planning staffs is mission dependant. National contingent forces should deploy with their integral medical and evacuation assets.
- Deployed in support of UN operations, Level 2 medical organizations will be task-organized. At minimum, they must be capable of:
 - Evacuation from and support to Level 1.
 - Triage, resuscitation and stabilization of the seriously injured, prior to evacuation.

- Diagnosis, treatment and holding of minor sick and injured, for the minimum time frame laid down by the CMedO, usually 1-5 days.
 - Maintaining records on and reporting the treatment and evacuation of the sick and injured to CMedO.
 - Provision of additional support and reinforcement to Level 1 organizations as necessary.
 - Dependent upon mission, Level 2 organizations might also require the capability to provide:
 - Emergency dental treatment.
 - Implementation and monitoring of hygiene and preventive medicine measures, including the management of combat stress reaction.
 - Medical re-supply to formation Level 1 organizations.
- Level 2 capability on an exceptional basis may be enhanced to provide Life and Limb Saving Surgery and post-operative management. This will require the addition of field surgical resources together with diagnostic and nursing support.

Level 3:

- Level 3 medical support is normally provided at formation level and will be mission-dependant. It will usually be deployed in support of UN operations where relatively large numbers of personnel are involved and where Host Nation Support (HNS) resources are inadequate or inappropriate to meet the medical mission. Responsibility for the provision of Level 3 support lies with UN medical planning staff, who may utilize HNS hospitals, National or Lead Nation facilities, including hospital ships, Non-Governmental Organization (NGO) hospitals or a combination of these.
- This level provides medical care in a facility staffed and equipped to provide resuscitation, initial wound surgery and postoperative care. These facilities may provide additional surgical support, additional laboratory and radiological support. This is the first level of actual hospitalization.
- Physiological monitoring devices and techniques must be available and employed. Equipment and appropriately trained personnel must be available at these levels to monitor and assess patient conditions.
- At medical facilities, dietary requirements must be planned with special consideration to cultural or religious factors of those being fed. Special requirements for acquisition will be coordinated with the Force Chief Logistics Officer.
- Whichever resource or combination of resources is provided, Level 3 medical support must be capable, at a minimum of:
 - Evacuation from Levels 1 and 2.
 - Triage, resuscitation and stabilization for further evacuation of the seriously injured and sick.
 - Life and Limb Saving Surgery for those who could not tolerate further evacuation without immediate treatment or for whom further evacuation would be problematic or inappropriate.
 - Diagnosis, treatment and holding of those injured and sick who can expect to RTD within the time-frame laid down by CMedO.
 - Emergency dental treatment, if not available at Level 2.

- If not undertaken at Level 2, implementation and monitoring of hygiene and preventive medicine measures, including the management of stress reaction.

Level 4:

- Level 4 provides medical care in a facility staffed and equipped for full definitive care which includes follow-up surgery and other rehabilitative therapy for patients in the recovery phase.
- Care is normally provided in facilities outside the theatre of operations; i.e., outside the regional area that is directly supporting the (UN termed) "in theatre" mission. However, Level 4 care can be provided within the supporting region when it is likely the individual patient will return to UN duty.

Documentation. Documentation is integral to medical care and an important part throughout the various levels of medical care. Charting of provided care is a mandatory requirement and provides a trail for any subsequent medical claims that may arise.

CMedO is responsible to ensure that all medical documents pertaining to medical care of the non-military personnel of a UN operation are provided in a timely manner as prescribed by UN HQ.

At each level must be an adequate documentation of all treatment measures. Documentation must begin at the initial point of injury or illness.

All personnel must have in their possession at all times an international certificate of vaccination showing all vaccinations and immunizations received. They should also obtain an authoritative record of blood type and RH factor. All personnel participating in a UN operation are required to have copies of their relevant health records with them at their supporting medical care facility.

When their UN mission is over, personnel are to take their own health records with them and turn them over to their new supporting medical facility. Whenever a patient leaves the mission area permanently, his medical records should be given to him in a sealed envelope addressed to the physician who will be responsible for the patient's future treatment.

In the case where a medical unit leaves the mission, all medical records should be handed over to the replacing unit, unless a patient expresses otherwise.

Medical Services to Non UN Personnel. Medical services to personnel outside the UN mandated mission is a matter of some delicacy, where legal commitments must be weighed against humanitarian principles. It must be planned carefully and fully coordinated in concert with the various non-governmental organizations that are present. The official UN policy is that a UN Force has no obligation to give, or to take responsibility for medical services to the local population unless the forces' mandate advises otherwise. However, emergency cases are always given priority regardless of person and party but must be transferred to HN facility as soon as possible. Health care for the civilian population should be run by the host country, aided by national and international relief organizations.

Triage. Triage is the evaluation and categorization of injured or ill personnel for treatment and evacuation. Triage facilitates the intelligent use of available resources thus serving the greatest number of patients. Sorting is accomplished by a special appointed medical personnel best qualified to make sound clinical judgements promptly and mandatory in a continuous action.

Autopsies. National Contingents will be expeditiously notified through the designated national liaison points of contact of individuals that become critically injured or ill and die. Any pathological materials or tissues taken in the course of conducting an autopsy or preparing a death certificate must be turned over to the descendant's national representative.

Personnel. The spectrum of personnel issues which impact upon or are generated by the medical support function is extremely wide. They emerge during the initial planning stages and continue long after an operation is finished. Consequently, the working relationship between medical and personnel staffs must be well developed and relevant personnel concerns detailed in medical plans.

The UN medical standards do not preclude national contingents or military services from establishing higher qualifying medical standards. In no cases, however, should an individual be unacceptable for national military duties, but be included in the UN military contingent force.

UN civilian staff, including those hired locally, military observers, and UN civilian police must be examined according to the UN medical guidelines. Detailed information about the medical examination of UN staff and locally recruited staff can be found in Staff Rule 100.15 and United Nations Field Administration Manual, Chapter 4, XXIV.

Although testing is not a mandatory requirement yet, it is therefore highly recommended that military or police personnel be tested and that personnel with known positive HIV status should not be sent to UN peacekeeping missions.

A UN Staff member on assignment to a mission is normally also entitled to reimbursement for the costs of medical treatment and hospitalization if the illness or accident is incurred while actually assigned to the mission or while in travel status on official business outside the mission area. Details are laid down in the United Nations Field Administration Manual, Chapter 4, XXXII.

Compensation for injury or death as a result of transportation furnished by the organization shall be regarded as service incurred and subject to compensation. The United Nations provides compensation for injury or death attributable to the performance of official duties.

Evacuation. The overall responsibility for planning and executing an effective medical evacuation system, lies with the UN medical planning staff and, in theatre, the administrative, operational, logistic and medical staffs working in concert. The CMedO plans and coordinates the medical evacuation plan in theatre which will be dependant on the evacuation resources available to support the operation.

Roles. Evacuation of the sick and wounded falls into two roles (Casualty Evacuation/CASEVAC and Medical Evacuation/MEDEVAC):

- Casualty Evacuation (CASEVAC). Describes the evacuation from points of injury to the next suitable level of care.
- Medical Evacuation (MEDEVAC). Describes the evacuation between the levels of care established in theatre (intra-theatre) or to medical facilities out of theatre (inter-theatre).
- Medical Repatriation. Describes evacuation of a patient not expected to RTD in theatre to his home country.

Plan. An effective and efficient evacuation plan must:

- Balance the medical capability and limit the need for unnecessarily sophisticated resources, at each Level of in theatre care.
- Ensure that while the minor sick and injured are managed and RTD at the correct Level, the seriously injured or ill are evacuated to appropriate treatment as rapidly as possible.
- Be dynamic, able to respond to rapidly changing operational imperatives.
- Be able to evacuate casualties 24 hours a day, in all weather and over all terrain.
- Evacuate from point of injury to Life and Limb Saving Surgery as rapidly as possible and normally within six hours.
- Enable critical sustainment of the casualty throughout the journey.
- Include a C3I system that can regulate the flow of patients when circumstances require and enable frequent and accurate patient tracking throughout evacuation.

Holding Policy. This policy is to be established based on the in theatre medical capabilities. Although holding policy may vary, Level 1 and Level 2 should have a holding capability of up to five days, Level 3 up to 30 days. Treatment for more than 30 days should usually cause repatriation at the soonest possible time. Patients will be transferred to their own national organization at the earliest practical opportunity.

When a national desire to evacuate its own personnel is contrary to the clinical opinion of the medical officer in charge, the decision whether an evacuation has to be executed or not will be made by the CMedO. His decision is binding for all parties. However, when a nation insists on evacuation of its personnel against the clinical opinion of the Medical Officer in charge and the CMedO, it becomes a national responsibility and may affect future claims against the UN.

Medically dedicated means of transport are preferred in support of UN operations. If available, they will conspicuously be marked as medical assets. In the absence of dedicated transport, specific ground and air assets will be designated with the additional mission of medical evacuations.

Medical repatriation is a medical evacuation normally back to the patient's own country. Medical repatriation on medical grounds applies to all those who are unlikely to be fit for duty within the evacuation or holding policy established, or those requiring treatment not available in the mission area. In general, 30 days is provided as a guideline for this evacuation policy. Once an individual is medically repatriated, continuing medical care is a national responsibility.

The medical welfare of the patient must be the paramount consideration. Evacuations will not take place unless the patient has been clinically determined to be stabilized to withstand the duration of the movement to the next care facility, with a high probability of not incurring complications requiring invasive treatment or intervention during evacuation beyond the scope of general supportive care during the evacuation.

Materiel. In this part there are only procedures mentioned which are different from the general supply regulations. Included are procedures for medical materials, their movement, medical maintenance and optical fabrication support.

The provisioning, holding, issuing and accounting of all medical, dental and veterinary supplies, such as equipment, pharmaceuticals and consumables, to a UN force is a joint responsibility of the CMedO, the Chief Administrative Officer and the Chief Logistics Officer, whose offices must cooperate to create an effective support system.

Reimbursement for contingent medical support is based on a fixed rate per person per level of support. Contingents providing level 2 or 3 facilities are reimbursed through special rates negotiated in the Contribution Agreement/MOU. For each particular mission, UN HQ must determine the methods to have medical sustainment supplies acquired for UN use. Concurrence from participating nations must be obtained prior to implementation.

Disposable medical supply products will be used as much as possible. UN reimbursement for medical sustainment costs are included in the fixed rates in the Contribution Agreement/MOU.

The CAO, in coordination with the Force Chief Logistics Officer and Chief Medical Officer, is responsible for the destruction of medical materials such as outdated pharmaceuticals, needles and syringes, and the disposal of contaminated medical waste.

Blood. Blood and blood products are perhaps the most sensitive of national contingent concerns in UN operations. The quality assurance of blood and blood products begins at the time of collection and continue all the way to the time of transfusion. Some national contingencies have requirements for a quality control system that continues beyond the time of transfusion in regard to documentation policies.

Because provision and transport of blood and blood products is a matter of such high importance, a lead nation's designation for sourcing of blood and blood products is encouraged whenever centralized blood support cannot be ensured by UN. The CMedO, in concert with national contingent medical officers, will establish the blood support plan to the UN operation.

Nations desiring a national supply of blood and blood products will do so at no additional expense to the UN.

LESSON 8
END-OF-LESSON QUIZ

1. Which of the following is not a precept for UN medical support?
 - a. International Conventions for the Treatment of the Sick and Wounded
 - b. Capability of Medical Support
 - c. Entitlement to Medical Care
 - d. Standards of Medical Support
 - e. none of the above

2. Place the following levels of medical care in their progressive order.
 - a. Resuscitation and stabilization of vital functions
 - b. Definitive treatment and rehabilitation
 - c. Life and Limb Saving Surgery, including post-operative care
 - d. First aid

3. The UN is generally responsible for which levels of medical support?
 - a. Level 1 and 2
 - b. Level 2 and 3
 - c. Level 1, 2 and 3
 - d. Level 2, 3 and 4
 - e. Level 3 and 4

4. Who establishes the policy for the evacuation of patients?
 - a. the medical staff
 - b. the operational staff
 - c. the Force Commander
 - d. the Chief Medical Officer
 - e. all of the above

5. In the majority of UN operations, which of the following is the most likely risk to UN personnel?
 - a. hostile acts and landmines
 - b. accidents and general disease
 - c. contaminated food and water
 - d. air pollutants
 - e. combat stress

6. List the Medical Support Functions.
 - 1)
 - 2)
 - 3)
 - 4)
 - 5)
 - 6)
 - 7)
7. Management of the minor sick and injured who can quickly return to duty is provided under which level of medical support?
 - a. Level 1
 - b. Level 2
 - c. Level 3
 - d. Level 4
 - e. none of the above
8. In planning the level of support for a mission, what is the normal time factor for which Level 3 care should be available after an injury?
 - a. one hour
 - b. three hours
 - c. six hours
 - d. twelve hours
 - e. twenty-four hours
9. Who determines the standard for receiving blood and blood components?
 - a. the Mission Headquarters
 - b. the National Contingents
 - c. the UN Headquarters
 - d. the International Standards Organization (ISO)
 - e. none of the above
10. Which of the following should not apply to the CMedO?
 - a. be the Head of the Medical Unit in the Mission HQ
 - b. be the Chief of a Contingent Medical Unit
 - c. be selected from the national contingent providing the majority of medical forces
 - d. be the Medical Advisor to the Force Commander
 - e. all of the above

**LESSON 8
ANSWER KEY**

1. e. none of the above
2. d, a, c, b
3. b. Level 2 and 3
4. e. all of the above
5. b. Accidents (non-battle injuries) and general disease
6. Treatment, Personnel, Evacuation, Materiel, Blood, Preventive Medicine, and Command, Control Communications & Information
7. b. Level 2
8. c. six hours
9. b. National Contingents
10. b. be the Chief of a Contingent Medical Unit

This page intentionally left blank.



LESSON 9

COMMUNICATIONS

- 9.1 Introduction
- 9.2 Role & Organization
- 9.3 Implementation
- 9.4 Communications Security
- 9.5 Communications Training
- 9.6 Provision of Equipment

LESSON OBJECTIVES

This lesson will cover the general provision of communications support and services in a mission area. It will also cover the United Nations guidelines for the provision of computer equipment, local and wide area networks and other related EDP items. The emphasis will be on the relationship between the United Nations communications and computerized network and logistics support to a mission.

By the end of Lesson 9, the student should be able to meet the following objectives:

- Understand the organization of communications services in a mission area;
- Understand the basic support concepts and lines of support;
- Identify common communications equipment and services; and
- Understand the difference in maintenance support for contingents providing their own communications support and equipment under a Contribution MOU.

9.1 Introduction

The United Nations with its many missions throughout the world is required to provide the commanders and their staffs, for command and control, with reliable and independent local and global communications to allow them to successfully achieve their missions. Very often the countries and regions where UN operations are taking place have been devastated by war or conflicts and their infrastructures have been partially or completely destroyed. Therefore, the success of any mission relies on the capability of the UN to readily deploy and provide the required communications services.

The communications networks normally require an amalgamation of technology which can be confusing even to the most experienced user. This confusion can arise from factors such as:

- the proliferation of services available;
- the mix of military and civilian equipment;
- the lack of personnel or budgetary management guidelines;
- the failure to clarify where the responsibility lies for the use, control and maintenance of equipment; and
- the ambiguity in the definition of the mandates of the Military Senior Signal Officer (Force Signals Officer) and the Civilian Chief Communications Officer.

Area of Responsibility. In general terms, the communications section's responsibilities are to provide all necessary communications facilities and related utilities to enable the missions to carry out their mandates independently, efficiently, and within the existing time and budgetary constraints.

The communications sections are normally responsible for providing the following services to the deployed missions:

- telephone and facsimile services;
- messaging services (RTTY, E-mail);
- landlines links;
- HF, VHF, UHF radio links;
- microwave links;
- satellite communications links; and
- special equipment such as photocopiers, TV sets and audio-visual equipment.

In addition, it is the responsibility of the communications staff, in conjunction with their military counterparts, to produce and issue Communication & Electronics Operating Instructions (CEOI) and Telephone Directories.

9.2 Role & Organization

This section depicts the organization of a field communication section. The strength of the section and its various units will vary with the missions, its complexity and associated requirements but the essence of the organization should generally remain as shown below in Figure 9-1.

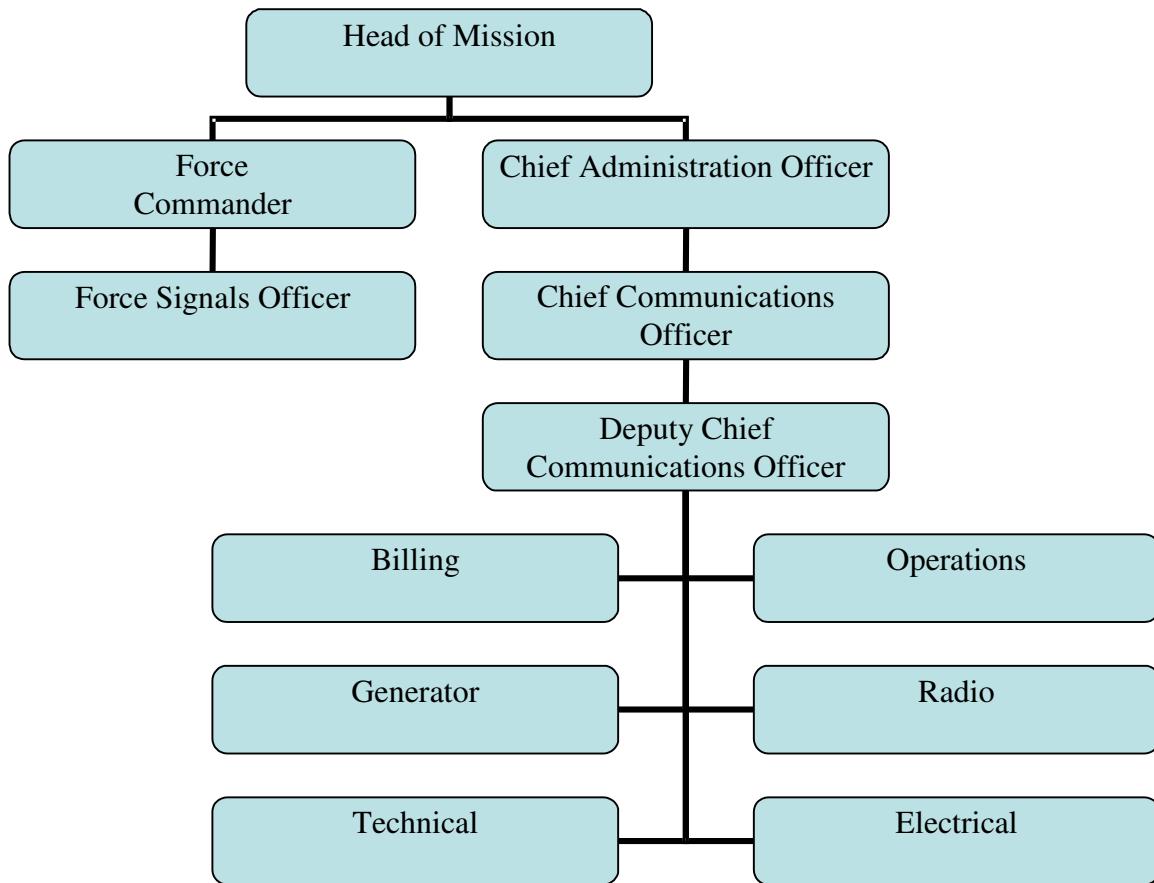


Figure 9-1

The figure shows the suggested baseline organization; however, it is essential that the Chief Communications Officer, in the initial deployment phase, produces the actual mission organization chart showing all assigned personnel. The suggested organization chart is basically broken down in six fields or areas of employment, the Operation Unit, the Technical Maintenance Unit, the Radio Stores Unit, the Billing Unit, the Generator Unit and the Electrical Unit. This organization chart maximizes the commonality between the civilian and military communications organizations to facilitate the required interaction between counterparts. The use of organization charts will save time in quickly informing the staff on the organization of the communications section and on its reporting chain.

The main duties and responsibilities of the key staff personnel are outlined below:

Chief Communications Officer (CCO). The CCO reports and is responsive to the Director Of Administration (DOA) or Chief Administrative Officer (CAO) and is responsible for:

- the planning, implementation, operation and control of all the mission's communications networks in accordance with its mandate and in coordination with local authorities and the various components of the mission;
- regularly liaison and coordinating with the Force Signals Officer (FSO) to ensure consolidation of communications resources including personnel;
- maximizing the integration of the mission's communication network within the UN global communication network;
- managing personnel, budget and communications equipment; and
- direct liaison with UNHQ/OMS communications section.

Deputy Chief Communications Officer (D/CCO). The D/CCO reports to the CCO and is responsible for:

- assisting the CCO in the planning and coordination of the section's tasks;
- handling and routing all communication section's correspondence;
- the coordination of all communications equipment and personnel movement within the mission area; and
- the planning, implementation, operation, maintenance, control and billing of all telephone and facsimile equipment, including telephone exchanges and lines.

9.3 Implementation

Listed below in chronological order are critical tasks or functions that the CCO and staff should follow on a step-by-step basis. This list, though not exclusive, represents the critical milestones to be considered in the establishment of a new mission. Certain circumstances may dictate changes in the order of precedence. The tasks are:

Prior to deployment: It is essential that a technical site survey be performed. The survey should be done by going to the location; however, circumstances might dictate that it has to be done by using maps. This survey is essential in order to select suitable sites for the installation of the mission's communications equipment and to assess the availability of the local resources and infrastructure. Some of the critical items that must be assessed are:

- local electrical power capabilities;
- on-site housings for:
 - satellites communications earth stations,
 - switchboard & radio-rooms,
 - communication centres,
 - HF, VHF, UHF radio & trunking system base stations, and
 - radio repeaters; and
- the provisioning of all required communications equipment.

On deployment: Establishment of a basic communication link (voice or data) with UNHQ directly or through another mission (Inmarsat, HF link, local telephone, etc.) in order to provide the mission's staff with an orderwire (OW) or engineering orderwire (EOW) and allow basic Command & Control of the mission. Establishment of the communication link includes:

- Establishment of basic utilities, such as generator power, electrical wiring, air conditioning, housing;
- Liaison with external agencies, as required, for frequency allocations (local governmental organization, joint task force HQ, etc.);
- Creation of critical documents such as Communication & Electronics Operating Instructions (CEOI) and Telephone Directories;
- Establishment of a communications centre, including the installation of the switchboard;
- Issuance of the communications equipment, CEOI;
- Establishment of communications networks, using the appropriate communications medium (SDS, landlines, HF, VHF, UHF, Satcom/Microwave), by priority;
- Internal Communications, within units, within HQs;
- External Communications, inter-units, inter-HQs, unit-HQs;
- Rear links (Mission HQ-UNHQ, Mission HQ-other Mission);
- Installation of the special equipment such as facsimile, photocopier, TV set, VCR, Audio-Visual equipment; and
- Supervising the operation and maintenance of the global network.

9.4 Communications Security

Communication Security is defined as being the action of denying unauthorized persons access to information of value. The CCO and communications staff are responsible for establishing and enforcing communications security policies. However, all users are responsible for applying the policies in order to make Communications Security fully effective.

9.5 Communications Training

The CCO/Communications Training Coordinator are responsible for training the users on the various communications systems. Adequate communications training is vital to ensure uniformity in procedure and avoid unnecessary waste of resources, and above all, to conform to international rules and regulations. It is suggested that communications users follow the communications procedures provided in the Operation Support Manual in order to conform to a common and established baseline. The users are to become very comfortable with the communications equipment issued to them in order to avoid failures in critical situations.

9.6 Provision of Equipment

The introduction of the Contingent Owned Equipment Memorandum of Understanding (COE MOU) has changed the method and the philosophy of how communications are provided by or to contingents. Since basic communications is a necessity with any military force, and a certain level of communications capability is expected to be integral to military forces when they deploy into the mission area. The COE MOU concept recognizes this by assigning a per person rate for basic communications capability. This rate covers the provision and maintenance of internal radio and telephone communications.

The CCO is responsible for the provision of communications equipment and its maintenance that are external to the contingent's requirement. If the contingent is tasked with providing communications to the Force, such as a communications unit, the reimbursement for their equipment and its maintenance is handled as major equipment. Specific rates are established for each category of major communications equipment, such as telephone exchanges, antennae/microwave towers, and satellite links.

LESSON 9
END-OF-LESSON QUIZ

1. Which of the following is normally a service provided by the communications staff?
 - a. E-mail messages
 - b. photocopiers
 - c. TV sets
 - d. Computers
 - e. all of the above

2. List the six units in the Chief Communication Officer's staff.
 - 1)
 - 2)
 - 3)
 - 4)
 - 5)
 - 6)

3. Mission communication networks normally require which of the following?
 - a. Telephone lines
 - b. Satellite links
 - c. Radio links
 - d. Microwave links
 - e. an amalgamation of technology

4. Who is directly responsible for the planning, implementation, operation, maintenance, control?
and billing of all telephone and facsimile equipment, including telephone exchanges and lines.
 - a. the Billing Unit
 - b. the Operation Unit
 - c. the Technical Maintenance unit
 - d. the D/CCO
 - e. the CCO

5. Prior to deployment, which of the following is an essential task for the communications staff to perform?
 - a. determine contingent communications requirements and capabilities
 - b. coordinate Host Nation Support
 - c. conduct a technical survey
 - d. select suitable sites for communications installations
 - e. purchase all necessary equipment

6. Which of the following is the number one priority when establishing communications on deployment?
 - a. Rear links (Mission HQ-UNHQ, Mission HQ-other Mission)
 - b. Rear Links (unit-contributing nation)
 - c. Internal Communications (within units, within HQs)
 - d. External Communications (inter units, inter HQs, units-HQs)
 - e. Internal Communications (Mission HQ – HNS)

7. How are contingents reimbursed for the radios and field telephones they use as part of their mission?
 - a. fixed rate for each type of equipment
 - b. depreciation based on an in-survey value
 - c. a fixed rate per person supported
 - d. as determined by the CCO
 - e. no reimbursement

**LESSON 9
ANSWER KEY**

1. e. all of the above
2. Billing, Operations, Generator, Radio Stores, Technical Maintenance and Electrical
3. e. an amalgamation of technology
4. d. the Deputy Chief Communications Officer
5. c. conduct a technical site survey
6. c. Internal Communications (within units, within HQs)
7. c. a fixed rate per person supported



LESSON 10

POSTAL AND COURIER SERVICES

- 10.1 Postal Services
- 10.2 Postal Operations
- 10.3 Free Mail Service
- 10.4 Mail and Diplomatic Pouch Unit
- 10.5 Base Post Offices
- 10.6 Courier Services

LESSON OBJECTIVES

This lesson will outline the conduct of postal services by the United Nations for its missions. Students will be informed as to the various postal services available and their intended use. The lesson will include the standard organization and operations of mission post offices and the provision of courier services.

By the end of Lesson 10, the student should be able to meet the following objectives:

- Understand the organization of postal services in a mission area; and
- Understand the types of services available and their intended purpose.

10.1 Postal Services

General. The timely and regular arrival of personal mail is of the utmost importance to the morale of the personnel in any field mission, since the personnel often spend long periods of time in relative isolation with limited means of communication with their families, relatives and friends. Thus, field missions must establish their own postal facilities, the nature and extent of the services of such facilities depending on the type, size and planned duration of the mission.

Base and Field Post Offices. In field missions with peacekeeping forces, the United Nations usually authorizes the establishment of a Force Post Office (FPO) staffed by military personnel and operating under the supervision of the Force Postal Officer. Additional field post offices may be established when distances, deployment of the forces or other conditions so require.

Mail and Diplomatic Pouch Unit. In all other missions, mail is handled by the Mail and Diplomatic Pouch Unit staffed by civilian personnel and operating under the Chief General Services Officer. Missions with peacekeeping forces normally also have a separately established Mail and Diplomatic Pouch Unit in addition to a Force Post Office.

The Chief Administrative Officer (CAO) is the advisor to the Head of Mission on all matters concerning postal services and entitlements and must be consulted in postal policy matters. Contingent postal matters which cannot be dealt with by the individual Contingents will be resolved by Contingent/CAO.

Philatelic Services. Philatelic services are not available from field missions' postal services. Holders of UN franking impress means are not permitted to use them for anything else but to stamp free contingent mail. More specifically, their use for cancellation of postage stamps, the provisions of postmarks in any other daily postal operation or fulfilling philatelic requests is strictly forbidden.

10.2 Postal Operations

The handling of mail to and from field missions is governed by local conditions in accordance with the available means of transportation, agreements with troop contributing governments, local as well as host government, local postal facilities and the United Nations Diplomatic Pouch Services.

Prohibited articles. All articles listed below are prohibited from dispatch through United Nations postal or pouch facilities to and from a field mission:

- coins, banknotes, negotiable bonds payable to the bearer;
- precious metals including platinum, gold, silver; precious stones, jewels, jewelry and archaeological specimens which are the property of the host country;
- articles which by their nature or their packaging may expose mail handlers or postal officials to danger or may soil or damage other mail;

- explosives, ammunition, inflammable or corrosive materials;
- living animals, insects and the like;
- opium, morphine, heroin, cocaine, hashish and any other form of narcotic drug;
- obscene or immoral articles, such as pornographic literature, photographs, films and video tapes;
- earth, sand, grass, straw, seeds or plants;
- any weapons, and related souvenirs; and
- all other items prohibited by legislature in the originating or receiving country. (For example the importation of ivory and articles made thereof as well as certain animal skins is strictly forbidden by US legislation.)

Central Mailing Address in the Mission Area. The United Nations will establish a central mailing address for the field mission. This usually takes the form of a post office box (P.O. Box) dedicated to the exclusive use of the field mission concerned, usually set up at a suitably located post office in the nearest or best accessible city or town to the mission Headquarters. To use the central mailing address of a field mission, mail should be addressed as follows:

Name - Title, Full Name, Service Number
Mission Component - Contingent Name
Field Mission - Mission Title
Post Office Box # _ _ _ _
City, Country

This central mailing address may be used by all mission personnel for their incoming first class and ordinary mail. Unless specifically authorized by the United Nations, it shall not be used for any other mail, such as registered mail, parcels, money transfers, etc. For the latter type of mail, other arrangements must be made locally on an individual basis. In this connection it is suggested that this type of mail be sent "Poste Restante" to a suitably located post office and its collection shall be the addressee's responsibility.

Special Post Office Box at UN Headquarters. Except for short term missions of less than three months duration, the United Nations, on request of a field mission, establishes a special post office box at the Grand Central Station post office in New York, USA, dedicated exclusively to mail destined to a particular field mission. The staff of Mail Operations of the Office of General Services, UNHQ is responsible for the collection of the mail and its onward shipment to the field mission through diplomatic pouch channels. To use the special post office box of a field mission, mail should be addressed as follows:

Name - Rank, Title, Full Name, Service Number
Mission Component - Contingent Name
Field Mission - Mission Title
Post Office Box # _ _ _ _
Grand Central Station
New York, NY 10163- _ _ _ _
USA

The special post office box number will be published by the Mail and Diplomatic Pouch Unit and also the Base Post Office, if established. The special post office box is regulated by the applicable instructions governing the United Nations Diplomatic Pouch Services. Only letters, post cards and periodicals may be sent by the official diplomatic pouch. All other mail will be rejected by Mail Operations and returned to the sender.

To guarantee a timely dispatch of mail to a field mission, stamps of sufficient value must be affixed to cover the dispatch from the originating country to the mission area or, as applicable, New York, USA, via regular postal means.

The United Nations does not provide free mail facilities for mail from home countries to Contingents.

Special Mail Services - National Arrangements. Some troop-contributing countries, through their own postal or military authorities, establish for their Contingents a central postal address in the home country (internal postal address) and accept mail for their troops at the local postal rate. Such mail, which is normally limited to first class mail, would usually be addressed as shown below:

Rank, Full Name, Service Number	
P.O. Box # _ _ _ _	}
City	} Internal Postal Address
Country	}

At predetermined times, on a specific day of the week, the home postal or national military authorities will arrange for all mail received at the national postal address to be collected, bagged, sealed and dispatched by air-freight to the central mailing address of the mission clearly stating the Contingent's name. The collection and delivery of this mail to the Contingent concerned will be arranged through the postal facilities of the field mission. Alternatively, some countries provide special service flights for their troops assigned to a mission. Such flights may include the carriage of parcels as well as of first class mail.

It is emphasized that it is the responsibility of Contingents and their national authorities to make such special arrangements for the delivery of mail, whether it be via commercial carriers, service flights or a combination of both. Consequently, the Governments of the Contingents concerned will bear all charges relating to the transportation of the mail from the home country to the central mailing address in the mission area. Clearing expenses, if any, may be absorbed by the United Nations.

Mail from the Mission Area or Outbound Mail. Field missions usually provide two different dispatch services for mail from the mission area to outside parties. The first one is via the diplomatic pouch for on-forwarding from New York, USA. The second one is to dispatch mail through the local postal services in the mission area. If established, these services would not only be available for the sending of official correspondence but they would normally be provided to all mission personnel for their personal mail. However, certain limitations apply in each case which may differ from one field mission to another.

All outbound mail through United Nations postal facilities must be prepaid with stamps of sufficient value to cover the dispatch through regular postal means. The only exception to this rule is the **free mail service**, which is, however, only provided to members of Contingents. In addition to prepayment, other conditions and limitations apply for the handling of outbound mail. While a detailed list of these shall be established by each field mission the following general rules exist.

- All outbound mail to be handled by United Nations postal facilities must not bear any other inscription than the name and address of the receiver and that of the sender. The sender's return address may either be placed on the top left hand corner or on the reverse side of the envelope. Items to be dispatched by pouch which do not show the name and address of the sender may be opened, inspected and handed over to the responsible Security Office for disposition.
- Stamps or franking impressions must be placed on the top right of each piece of mail.
- It is the sender's responsibility to ensure that their outgoing mail bears sufficient postage to cover dispatch from either the mission area or as appropriate, New York to its final destination. Mail with insufficient postage will be rejected and returned to the sender.
- Personal mail which due to its type, size, weight or other limitation is excluded from a dispatch utilizing the field mission's postal services must be arranged personally by the individual concerned through other arrangements.

Mail forwarded through the Diplomatic Pouch. In addition to clearly marked official mail, personal mail may be sent from the mission area to any destination using the United Nations Diplomatic Pouch System, if and when established. All mission personnel may utilize this service. While strict weight and size restrictions do not exist for official mail, only first class letter personal mail will be accepted under this arrangement. All other personal mail such as parcels, registered mail, etc., will be rejected. Items for personal use, such as food and clothing, are not permitted in the pouch.

To make use of this pouch forwarding service, personal mail must be submitted to the Mail and Diplomatic Pouch Unit with uncancelled United Nations stamps with US denominations of appropriate value affixed. The mail will then be forwarded via the diplomatic pouch to the United Nations Headquarters, New York. There, the stamps will be cancelled at the United Nations postal office and subsequently dispatched to its final destination utilizing the available regular governmental mail services.

Mail dispatched through local postal services. The postal facilities of a mission will provide for the dispatch of official UN documents and related mail through regular local postal means. Depending on the local conditions the United Nations may decide to extend these services to all mission personnel. Should this be the case, the mission's postal facilities will usually accept personal mail, newspapers and parcels, provided they are prepaid with national postage. The mail will be delivered at predetermined days and times to the nearest post office. The extent to which these services are offered will be established by each separate field mission and shall be published as appropriate.

Special arrangements. The United Nations may authorize special arrangements for outbound mail of Contingents. A typical arrangement is Prepaid Mail from Contingents to Home Countries. Overweight first class mail (exceeding 10 grams), registered mail, newspapers or parcels may be exchanged between Contingents and their home countries in accordance with arrangements made with their Government's home postal administration. Such arrangements are likely to vary between carriage *via* national support flights, commercial air freight and other means of conveyance agreed to by the two parties. The costs of these additional mailing services are to be borne by the national Governments concerned.

10.3 Free Mail Service

In the Aide-Memoire for Troop-Contributing Governments, the United Nations shall detail the free dispatch to a central address in the home country of a limited number of air letter forms for contingent personnel.

United Nations Aerogrammes. Special United Nations air letter forms, commonly called "aerogrammes," are usually provided by the United Nations to contingent members at no cost. The Contingents shall requisition UN aerogrammes from the base post office showing the actual or, if applicable, the projected strength of the Contingent and the time during which the forms are going to be used.

Limitations. If United Nations aerogrammes are issued by a field mission, these air letter forms shall be considered the principal medium for personal correspondence sent by members of a Contingent utilizing the free mail service.

The United Nations' free mail services are limited to the delivery of authorized Contingent mail to the designated central postal address in a home country. It is important to note that all in-country forwarding arrangements are to be organized by the troop-contributing Government concerned. Under no circumstances will the United Nations be responsible for the costs of internal mail distribution operations.

Responsibilities of the Troop-Contributing Countries. Contingents wishing to utilize the free mail service using the United Nations franking impression in lieu of stamps must obtain clearance from their national postal authorities to ensure that mail so dispatched will be honoured for delivery within their homeland.

To ensure that mail reaches its final destination in the home country, national military authorities may wish to advise their Contingents of their country's internal postage requirements. In this case Contingent members should be afforded with an opportunity to purchase the required stamps in the mission area.

Free Mail Entitlements - Personal mail. The exact entitlements of Contingent members to send a limited number of personal mail free of charge is established by the United Nations for each field mission separately, taking into consideration the prevailing local

conditions and other relevant facts. The entitlement will under no circumstances exceed five free pieces of mail (letters, aerogrammes and post cards) per man per week.

Only mail classified as first class letter mail weighing 10 grams (approximately ½ ounce) or less shall be accepted under the free mail arrangement. No enclosures are permitted in aerogrammes and aerogrammes with enclosures will be rejected. The free mail service for personal mail does not include registration or any other specialized mail services. Such mail cannot be sent under the free mail service and other arrangements for dispatch have to be made by the individual concerned.

Free Mail Entitlements - Official Mail. A Contingent's official mail may be forwarded to a central postal address in the home country at the expense of the United Nations. To be accepted under the free mail service the cover of the official mail shall be endorsed "Official Mail" and signed by the authorized military officer of the Contingent, who shall indicate his rank and name. Free registration service is available for this category of mail and the 10 gram weight limit does not apply.

Payment of transportation charges. The civilian airlines and postal administrations involved in the transport of United Nations free mail shall submit their accounts to a designated United Nations official in the field mission, usually the Chief, Mail and Diplomatic Pouch Unit. This official will, jointly with the Force Postal Officer, verify the invoices on the basis of the dispatch records. Invoices duly certified by the authorized official shall be settled by the CFO.

Special arrangements. Contingents with a National Support Element Postal Service shall have the option, for operational efficiency reasons, to make their own arrangements for free mail within the limitations and principles of the UN Free Mail policy. These arrangements will not result in additional cost to the United Nations.

10.4 Mail and Diplomatic Pouch Unit

Responsibilities. The MDPU has the overall authority for Postal and Diplomatic Pouch Services of a field mission including:

- the sale of United Nations and usually local stamps to all mission personnel;
- the distribution of mail received through the diplomatic pouch;
- the establishment of diplomatic pouch services with United Nations Headquarters and other entities as needed;
- the administration of the proper dispatch of the outgoing diplomatic pouches on regular, usually weekly, basis;
- the dispatch of official UN documents and letter mail through local means, as and when required;
- the promulgation of the applicable instructions governing the United Nations Diplomatic Pouch Services and for monitoring the strict implementation and adherence to its relevant provisions; and
- the performance of other functions that may be entrusted to him/her in carrying out the responsibilities of a pouch certifying officer.

In larger field missions with military contingents some of the postal services are rendered jointly with, or sometimes solely by, the Base Post Office.

10.5 Base Post Offices

Organizational set-up. The Base Post Office (BPO) is staffed by military personnel who report to the Force Postal Officer. The BPO is usually one of the entities under the direct control of the Chief Logistic Officer (CLO). The BPO shall preferably be located at the Headquarters of a field mission. The general organization of postal services provided by the BPO and its operations are governed by a corresponding Logistic Directive issued by the field mission concerned after clearance by the CAO.

Responsibilities. It is the responsibility of the BPO to receive the bundles of free mail from the Contingents, to consolidate the bundles of mail in proper mailbags and in coordination with the MDPUs to arrange its dispatch via commercial or military aircraft or civil postal channels to the postal or military authorities in the respective home countries.

The Force Postal Officer is also responsible for:

- establishing and disseminating the schedules and deadlines for the submission mail by Contingents to the BPO;
- bagging, billing, tagging, sealing and dispatching of free mail;
- assisting the Chief, MDPU in arranging the transfer of paid airmail to commercial or military aircraft or civil postal channels;
- distributing incoming mail for Contingent personnel;
- issuing UN aerogrammes to Contingents on request, managing the stock holdings of this form, and should more stock be required, requisitioning it through MDPU; and
- monitoring the correct utilization of the free mail system and the proper usage of the UN franking impression system.

10.6 Courier Services

General. The timely and secure movement of classified dispatches is essential to the efficient operation of any field mission and to the safety of those taking part. All personnel involved in the provision of this type of service must be fully conversant with their duties and be of suitable calibre to carry out their task. The Governments or their military authorities should normally confirm the suitability of such personnel before they are appointed to courier duties.

Courier Services to and from Field Missions. The method chosen to move dispatches overseas will depend on the classification of the item and the particular circumstances applying to the country concerned. All UN classified items originating in theatre for dispatch overseas will be circulated to a concentration point for dispatch under collective arrangements.

The United Nations Diplomatic Pouch Services provides a regular link from the UNHQ in New York to field missions and vice versa. At UNHQ in New York arrangements are made with the United States Department of State for the secure movement of these dispatches within the country. Dispatches from field offices are moved under arrangements with the governments concerned. The Diplomatic Pouch Services at UNHQ in New York are administered by the Office of General Services, Department of Administration and Management. In field missions a suitably qualified officer, nominated by the Chief Administrative Officer of a mission, will be authorized to act as pouch certifying officer for that operation. Further information on this service and relevant stipulations are covered in an Administrative Instruction.

As field missions are accredited diplomatic posts, Article 27 of the Vienna Convention on Diplomatic Relations applies and allows for the safe movement of diplomatic dispatches across international borders in support of these missions. All such dispatches are to be correctly documented and must bear visible external marks of their character and may only carry diplomatic documents or articles intended for official use.

To ensure the integrity of classified dispatches, they must be moved across international borders by a Diplomatic Courier. This person, who shall be provided with an official document indicating their status and the number of packages constituting the diplomatic bag, shall be protected by the receiving state in the performance of his function. They shall enjoy personal inviolability and shall not be liable to any form of arrest or detention. Diplomatic couriers can be designated ad hoc. When this occurs, immunity shall cease to apply when such a courier has delivered to the consignee the diplomatic bag in their charge.

Often troop contributing Governments provide at their expense their own secure courier service between the field mission and their home country. This service can be either organic to its military operation or be run separately by their government. Governments are encouraged, wherever possible, to offer assistance to other participating Contingents, if they do not have their own courier services.

Courier Services within Field Missions. The safe movement of UN classified mail within a theatre of operation is ultimately the responsibility of the Head of Mission via the Force Commander for military matters and via the Chief Administrative Officer for all other matters.

The FPO will normally be responsible for the day-to-day movement of classified military mail within Headquarters, and between Contingent Headquarters and the Mission Headquarters, while the Chief, MDPU will be responsible for the handling of all other classified dispatches. Where security allows and delays will not be incurred, classified mail should move as a discrete operation alongside the unclassified and private mail service. Urgent classified items should be delivered independently using a dedicated courier.

LESSON 10
END-OF-LESSON QUIZ

1. Why is the timely and regular delivery of mail of the utmost importance?
 - a. to ensure continuous communications with the Mission headquarters
 - b. to provide diplomatic immunity for sensitive materiel
 - c. to maintain the morale of the mission personnel
 - d. to meet contingent communication requirements
 - e. to fulfil UN contribution agreements

2. Which branch of the CAO's organization is responsible for mail services?
 - a. the Chief Communications Officer
 - b. the Chief Logistics Officer
 - c. the Force Postal Officer
 - d. the Chief General Services Officer
 - e. the Chief Transportation Officer

3. Who may use the mission central mailing address for their incoming first class and ordinary mail?
 - a. Mission civilian personnel
 - b. Mission military personnel
 - c. All mission personnel
 - d. Specially authorized personnel
 - e. Postal staff

4. The Special Post Office Box at UN Headquarters is established for what type of mission?
 - a. missions of less than three months duration
 - b. missions greater than three months duration
 - c. missions without a Base Post Office
 - d. all missions
 - e. none of the above

5. Mission personnel may receive registered mail, parcels and money orders through which of the following systems.
 - a. by individual arrangement
 - b. through the central mailing address
 - c. through the Special Post Office box
 - d. through National arrangements
 - e. through the Mail and Diplomatic Pouch Service

6. Who is entitled to free mail service for out-bound mail?
 - a. all mission members
 - b. members of the civilian component
 - c. members of the military component
 - d. members of contingents
 - e. there is no free mail service
7. What is an aerogramme?
 - a. mail using the free mail service
 - b. the unit of measure for air mail weight
 - c. special UN air letter forms
 - d. mail greater than 10 grams
 - e. mail less than 10 grams
8. Who is responsible for the sale of UN stamps to mission personnel?
 - a. the MDPU
 - b. the BPO
 - c. the FPO
 - d. the CFO
 - e. the USPS
9. Where will you usually find the Base Post Office?
 - a. at the Logistics Base
 - b. at a mission central location
 - c. at the mission Headquarters
 - d. at the main airport or seaport
 - e. at UN Headquarters New York
10. What types of correspondence or articles may be safely across international borders under Article 27 of the Geneva Convention on Diplomatic Relations?
 - a. time sensitive or high priority items
 - b. classified documents
 - c. official use articles
 - d. diplomatic dispatches
 - e. all mail

**LESSON 10
ANSWER KEY**

1. c. to maintain the morale of the mission personnel
2. d. the Chief General Services Officer
3. c. all mission personnel
4. b. Missions greater than three months in duration
5. d. through National arrangements
6. d. members of contingents
7. c. special UN air letter forms
8. a. the Mail and Diplomatic Pouch Unit (MDPU)
9. c. at the Mission Headquarters
10. d. diplomatic dispatches

TABLE OF ACRONYMS

Acronym	Meaning
ACABQ	Advisory Committee on Administrative and Budgetary Questions
AIS	Aeronautical Information Service
AOCC	Air Operations Control Centre
APOD	Air Point of Debarkation
APOE	Air Point of Embarkation
ATC	Air Traffic Control
AVFUEL	Aviation Fuel
BPO	Base Post Office
C Air Ops	Chief Air Operations
C Maint O	Chief Maintenance Officer
CAO	Chief Administrative Officer
CASEVAC	Casualty Evacuation
CCO	Chief Communications Officer
CCPO	Chief Civilian Personnel Officer
CEO	Chief Engineering Officer
CEOI	Communications & Electronics Operating Instruction
CFO	Chief Financial Officer
CGSO	Chief General Service Officer
CISS	Chief Integrated Support Services
CLO	Chief Logistics Officer
CMCO	Chief Movement Control Officer
CMedO	Chief Medical Officer
CMPO	Chief Military Personnel Officer
CO	Commanding Officer
COE	Contingent Owned Equipment
COO	Chief Operations Officer
COS	Chief of Staff
CSO	Chief Signals Officer
CTO	Chief Transportation Officer
C3I	Command, Control, Communications & Information
CWO	Chief Welfare Officer
D/CCO	Deputy Chief Communications Officer
DOA	Director of Administration
DPKO	Department of Peacekeeping Operations
EOR	Explosive Ordnance Reconnaissance
FC	Force Commander
FFM	Force Fire Marshall
FLSG	Force Logistics Support Group

Acronym	Meaning
FPM	Force Provost Marshall (Military Police)
FPO	Force Post Office
FSO	Force Signals Officer
HAZMAT	Hazardous Materiel
HF	High Frequency
HN	Host Nation
HNS	Host Nation Support
HQ	Headquarters
IAW	In accordance with
ICAO	International Civil Aviation Organization
IOR	Immediate Operational Requirement
JMCC	Joint Movement Control Centre
LOA	Letter of Assist
LOC	Lines of Communications
MA	Military Adviser
MCC	Movement Control Cell
MCD	Movement Control Detachment
MCU	Movement Control Unit
MDPU	Mail and Diplomatic Pouch Unit
MEDEVAC	Medical Evacuation
MOU	Memorandum of Understanding
MSR	Main Supply Route
NGO	Non-Governmental Organization
NSE	National Support Element
OI	Operational Inspection
OMS	Office of Mission Support
OP	Observation Post
PCC	Provisional Condemnation Certificate
PM	Permanent Mission
POL	Petroleum, oil and lubricants
PSB	Property Survey Board
QM	Quartermaster
R&I	Receipt and Issue
RTD	Return To Duty
RTTY	Radio Teletype Non-secure
SAR	Search and Rescue
SG	Secretary-General
SMedO	Senior Medical Officer
SO Foods	Staff Officer Foods Services
SO Maint	Staff Officer Maintenance
SOFA	Status of Forces Agreement
SRSG	Special Representative of the Secretary-General
SSO Sup	Senior Staff Officer Supply
STOL	Short Take-Off and Landing

Acronym	Meaning
TV	Television
UHF	Ultra High Frequency
UNDP	United Nations Development Program
UNHCR	United Nations High Commission for Refugees
UNHQ	United Nations Headquarters
UNICEF	United Nations International Children Emergency Fund
UNNY	United Nations New York
UNOE	United Nations Owned Equipment
USG	Under-Secretary General
USPS	United States Postal Service
VCR	Video Cassette Recorder
VHF	Very High Frequency
WHO	World Health Organization

LOGISTIC DEFINITIONS

Administration. The management and execution of all matters in logistics personnel and financial management.

Administrative Control. Exercise of authority within the mission in respect to administrative matters.

Administrative Plan. A plan, normally related to and complementing the operation plan or order, which provides information and instructions covering the logistic and administrative support of the operation.

Airhead. A designated area in a territory which, when secure, ensures the continuous air landing of troops and materiel and can be used as a base for supply and evacuation by air.

Air Logistic Support. Support by air landing or air drop, including air supply, movement of personnel, evacuation of casualties and recovery of equipment and vehicles.

Basic Stocks. Stocks to support the execution of approved operational plans for an initial predetermined period.

Bulk Petroleum Product. A liquid petroleum product transported by various means and stored in tanks or containers having an individual fill capacity greater than 250 litres.

Bulk Storage. Storage in warehouse of supplies and equipment in large quantities, usually in original containers, as distinguished from bin storage.

Commonality. A state achieved when groups of individuals, organizations, or member states, use common doctrine, procedures or equipment.

Compatibility. The capability of two or more items or components of equipment or materiel to exist or function in the same systems or environment without mutual interference.

Contingent Owned Equipment (COE). Any military equipment owned by a member state brought to the mission area with the prior agreement of the UN secretariat and for which the member state intends to claim reimbursement.

Contractorization. The process by which military operations, generally in the logistic field, are transferred to a civilian body undertaking the same task under contract.

Contract Maintenance. The maintenance of materiel, performed under contract by commercial organizations.

Cross-servicing. That function performed by one member state for another for which the other member state or UN may be charged.

Direct Support. That support given by a member state from its own integral logistic unit directly to its contingent deployed on a UN operation. Re-supply may be along national lines of communication or under the terms of nationally arranged agreements in the mission operational area.

Distribution System. That system of facilities, installations, methods and procedures designed to receive, store, maintain, distribute and control the flow of military materiel between the point of reception into mission area and the point of issue (Distribution Point) to using units.

Force Logistic Directive. That document produced by the CLO which details the required level of stock holding of the contingents, the overall logistic support plan, the requirements from contributing member states and should include the Force Logistic Standard Operating Procedures.

Force Logistic Support Group (FLSG). A grouping of military and civilian personnel forming the logistic support for a UN force and operating under Mission HQ control. Depending on the size and geographical spread of the operation, each base area may be under a separate member state coordinating authority.

Force Logistic Plan. A plan which encompasses re-supply, maintenance requirements, replacement plans, spare parts requirements, etc. This is a "rolling plan," adjusted on a regular and/or as required basis.

General Agreement. These are basic agreements normally conducted at government to UN level. They are sometimes known as umbrella agreements.

Host Nation Support (HNS). Civil and military assistance rendered by a host member state to UN forces deployed within or staging through that member state, based upon agreements mutually concluded between the member state and the UN.

Interoperability. The ability of systems, units or contingents to provide services to and accept services from other systems, units or contingents and to use the services so exchanged to enable them to operate effectively together.

Lines of Communication. All the routes (land, water and air) which connect an operating UN force with home bases of the contributing member states, and along which supplies and personnel move. Internal lines of communication are those routes within the theatre of operations along which supplies and personnel move.

Logistic Assessment. An evaluation of the logistic requirements for a UN Force or contingent which is part of that force, in order that force, can conduct UN operations in a particular theatre of operations. Included in the assessment will be the actual and/or potential logistics support available within that theatre of operations.

Logistics. For the purposes of this manual, Logistics is defined as the science of planning and carrying out the administration, movement and maintenance of forces, engineering and air/aviation services.

Maintenance. Includes inspection, testing, servicing, and classification of materiel to restore it to a specified condition.

Materiel. All capital equipment (vehicles, portable housing, communications, engineering, aircraft, vessels, weapons) and support materiel (general stores, clothing) necessary to equip, operate, maintain, and support UN mission activities.

Mission. An operation in a particular geographic area which has been sanctioned by an appropriate UN Intergovernmental body (usually the Security Council).

Movement Control. The planning, routing, scheduling and control of personnel and freight movements over lines of communication. Also the organization responsible for these functions.

National Support Cell (NSC). That element of a member state's contingent which is incorporated in the Force Logistic Support Group headquarters specifically to look after the interests of that member state and to liaise with other contingents' cells.

National Support Element (NSE). That element of member state's contingent which is incorporated into the Force Logistic Support Group to look after the demands from that contingent. Its role includes providing an interface with the UN procurement organization through the ACOS Logistics or the CLO organization and maintaining that level of national stocks required by the Force Logistic Directive. The NSE also receives and stores supplies consigned from the home base.

Operational Command. The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational and/or tactical control as may be deemed necessary. It does not in itself include responsibility for administration or logistics.

Order and Shipping Time. The time elapsing between the initiation of stock replenishment action and the receipt of the materiel resulting from such action.

Peacetime Stock Levels. The level at which military units in member states maintain military materiel stocks to meet the needs of those units undertaking their normal peacetime role.

Petrol, Oils and Lubricants (POL). All petroleum and associated products used by the armed forces.

Planned Re-supply. The shipping of supplies from the home base in a regular flow as envisaged by preplanned schedules. Such a schedule will usually include some form of planned procurement. It may also include planned provision from the FLSG to the component parts of the Force.

Reimbursable. A category of personnel or materiel made available to the UN by agreement for use in a mission and for which reimbursement is made by the UN to the member state concerned.

Resupply. The act of replenishing stocks in order to maintain the required levels of supply.

Stock Level. This term is used to describe the quantity of materiel required for a given level of activity over a given period of time. The Force Logistic Directive will detail the stock level for any particular mission in terms of days. Member states will then translate this requirement into holdings of specific items.

Tactical Control. The detailed and usually local direction and control of movements or manoeuvres necessary to accomplish missions or tasks assigned.

Temporary Reception Area. That area designated for use by member states' contingents on first deploying to a mission area, prior to moving to designated operational areas.

End-of-Course Examination

**The End-of-Course Examination is provided as
a separate component of this course.**

**The examination questions cover the material in
all the lessons of this UNITAR course.**

**Read each question carefully
and**

Follow the provided instructions to submit your exam for scoring.

INSTRUCTIONS FOR FILLING OUT THE ANSWER SHEET

The End-of-Course Examination Answer Sheet is designed to:

- 1. Formally record your answers to the questions of the Final Examination; and**
- 2. Provide instructions for answer submission.**

Format of Questions

There are 50 questions. The answer sheet has numbered blocks, and each block corresponds to a similarly numbered question on the End-of-Course Examination. First, read a question through carefully. Then, mark your answer on the answer sheet with the number corresponding to the number of each question. Throughout the examination, check that the question number and answer sheet number is the same.

Exam questions generally give you a choice of answers, marked as A, B, C, or D. Choose only one response and mark only one choice on your answer sheet. If you mark more than one answer for a question, it will be graded as incorrect.

Use a Dark Pencil

Mark your response on the Answer Sheet using a dark lead pencil.

Time Limit to Complete the End-of-Course Examination

Because your enrolment in the course is valid for one year only, the examination must be submitted before your enrolment expires.

Passing Grade

A score of 75% is the minimum score required for a passing grade. If you pass, you will receive a letter indicating your score along with your signed Certificate-of-Completion. If your score is less than 75%, you will be sent a letter indicating that you have received a failing grade. At that time, you will be provided with an alternate version of the End-of-Course Examination, which you may complete when you feel you are ready. If you pass the second version of the examination, a grade report and a Certificate-of-Completion will be awarded to you. If you fail the second time, you will be informed and dis-enrolled from the course.

**AFTER COMPLETING THE EXAMINATION,
PLEASE IMMEDIATELY SUBMIT
YOUR ANSWER SHEET.**

ABOUT THE AUTHOR

Major Don Leslie (Retired) joined the Canadian Forces in 1975 and was commissioned a Lieutenant following his graduation from College Militaire Royal in 1979. Major Leslie served as an Army Officer in the Logistics Branch of the Canadian Forces until 1997 in assignments across Canada and in Lahr, Germany. He developed specialties in Transportation and Supply including advanced training with the Canadian Force School of Administration and Logistics, the US Army School of Transportation, the US Navy School of Ocean Transportation and Marine Terminal Management, and the McGill University Transportation Management Program. Major Leslie is also a graduate of the Canadian Land Force Command and Staff College.

In 1993, Major Leslie was posted to the Canadian National Defence Headquarters (NDHQ) Joint Staff Logistics Operations (J4 Log), where he was responsible for planning and implementing administrative and logistics support to Canadian contingents on UN and humanitarian missions. Major Leslie provided liaison service with UNHQ through the Canadian Permanent Mission to the UN and participated in several planning conferences for emerging missions. Major Leslie conducted reconnaissance and assessment missions to UNMIH (Haiti), UNAMIR (Rwanda), and UNPROFOR/UNPFI (former Yugoslavia). In addition, he worked extensively on Canadian missions in Cambodia, Mozambique, Western Sahara, Cyprus, Iran/Iraq, Kuwait, Nagorno-Karabach, and the Middle East.

Major Leslie was a Canadian delegate to the United Nations Working Group on the Reform of the Methodology for Reimbursement for Contingent-Owned Equipment (COE). Starting in early 1995, the Working Group developed a standard rate reimbursement system for equipment and personnel services employed on peacekeeping missions. Major Leslie participated in the creation of a generic list of equipment that calculated the rates and conditions of service for use by all troop contributors. It was subsequently approved by the General Assembly in 1996 as part of the COE Reform Methodology. Major Leslie was also the NDHQ logistics representative to two projects for the creation of an Operational Level Headquarters at UNNY and a UN Stand-by High Readiness Brigade (SHIRBRIG), for which he prepared the initial logistics concept.

Major Leslie retired from the Canadian Forces in 1997, working as an independent consultant and assisting DND with negotiations for retroactive claims. He went on to work at Accenture (formerly Andersen Consulting) as a Business Process Design Manager in the Supply Chain Management Practice of their Government Market Unit. In 1997, he took time off from this position to be a guest lecturer on the Lester B. Pearson Peacekeeping Centre UN Logistics Course.

In 2001, Major Leslie left Accenture to become a Partner with a HDP Group, an Ottawa-based management consulting firm. He has led the firm's supply chain management practice, working primarily with the Department of National Defence, the Department of Transport, and the Canadian Coast Guard.

Major Leslie is also the author of the Advanced Logistics POCI course, *The Provision of Troops and Contingent-Owned Equipment (COE) and the Method for Reimbursement*, which he completed in 2004.