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INTEROFFICE MEMORANDUM

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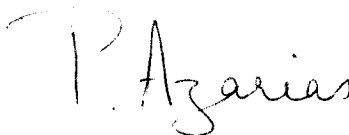
INTERNAL AUDIT DIVISION I  
OFFICE OF INTERNAL OVERSIGHT SERVICES

TO: Mr. Daudi L. Mwakawago, SRSG  
A: UNAMSIL

DATE: 15 April 2005

REFERENCE: AUD-7-5:53 (02576/05)

FROM: Patricia Azarias, Director  
DE: Internal Audit Division I, OIOS



SUBJECT: **OIOS Audit No. AP2004/622/02: Air Operations in UNAMSIL**

OBJET:

1. I am pleased to present herewith or final report of the above-mentioned subject which was conducted during October and November 2004. We have incorporated Management comments dated 3 February 2005 on the draft version as appropriate, shown in italics in the final report.
2. We note from your response to the draft report that UNAMSIL has generally accepted the recommendations. Based on the response, we are pleased to inform you that we have closed recommendations 1, 2, 3, 4, 12 and 13 in the OIOS recommendations database. In order for us to close out the remaining recommendations (5, 6, 7, 8, 9, 10, 11 and 14), we request that you provide us with additional information as indicated in the text of the report and a time schedule for implementing each of the recommendations. Please refer to the recommendation number concerned to facilitate monitoring of their implementation status.
3. IAD is assessing the overall quality of its audit process and kindly requests that you consult with your managers who dealt directly with the auditors and complete the attached client satisfaction survey form.
4. I take this opportunity to thank the management and staff of UNAMSIL for the assistance and cooperation provided to the auditors in connection with this assignment.

Copy to: Mr. Jean-Marie Guéhenno, Under-Secretary-General for Peacekeeping Operations  
Ms. Hazel Scott, Director, ASD/DPKO  
Mr. Kiplin Perkins, CAO, Division of Administration, UNAMSIL  
UN Board of Auditors  
Programme Officer, OIOS  
Elias Kedir, OIC, Resident Audit Office, UNAMSIL

# Office of Internal Oversight Services

## Internal Audit Division I



### Air Operations in UNAMSIL

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**Audit no:** AP2004/622/02  
**Report date:** 15 April 2005  
**Audit team:** Tilchand Acharya, Chief Resident Auditor  
Elias Kedir, Auditor-in-Charge

**EXECUTIVE SUMMARY**  
**Air Operations in UNAMSIL (AP2004/622/02)**

OIOS conducted an audit of air operations in the United Nations Mission in Sierra Leone (UNAMSIL) during October and November 2004. The main objectives of the audit were to determine whether: (a) the Mission's aircraft fleet was utilized safely, efficiently, effectively, and economically; (b) human resources allocated to Movement Control Section (MOVCON) and Aviation Section (AIROPS) were adequate and utilized efficiently and effectively; and (c) AIROPS and MOVCON rendered adequate services and adhered to regulations, rules and procedures relating to their respective operations.

AIROPS managed a total of 23 aircraft - 22 helicopters and one fixed-wing aircraft. Eight of the 22 helicopters were contingent-owned of which four were used strictly for military purpose and the rest for military and civilian purposes. AIROPS had a budgetary allocation of \$14.4 million for the 2004-2005 fiscal year and consisted of three units: Air Operations Center, Technical Compliance/ Quality Assurance Unit, and Airfield Management Unit. For the fiscal year 2004-2005, AIROPS had 85 authorized posts.

MOVCON's operational budget for the fiscal year 2004-2005 amounted to \$0.4 million. It consists of two major Units: the Joint Movement Control and Coordination Unit (JMCC) and the Operations Unit. MOVCON's authorized staffing table for the 2004-2005 fiscal year consisted of 35 posts - 5 internationals, 19 national staff, and 11 UNVs.

OIOS found that the authorized posts in AIROPS and MOVCON were not fully utilized. The Organization opted for expensive aircraft contracts when the old contracts expired, incurring additional costs of up to \$7,178,000 in fees for two (2) Mi26 and seven (7) Mi18 aircrafts alone. Furthermore, the 540 flight hours per year per helicopter allowed by the new contract exceeded the Mission's requirement by 39 to 86 percent.

OIOS also found that the fire safety at the airfield at Hastings and the helipad at Mammy Yoko was given low priority. Access controls to the airfield at Hastings and to the Lungi Airport were inadequate. Staffing requirement at the air control tower at Hastings was not fully met.

Some scheduled periodic maintenance works of aircrafts were not done and the reasons were not documented. Air safety staff did not receive training prescribed by the UN Air Safety Manual. The investigation on the helicopter crash of 29 June 2004 was not conducted in a timely manner. The Pilot-in-Command of the helicopter that crashed in Yengema on 29 June 2004 appeared to have lacked familiarity with the Mission area topography. The Search and Rescue Team that went to the crash location was not adequately equipped for the required tasks. MOVCON lacked certified personnel to handle dangerous/hazardous cargo.

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## **I. INTRODUCTION**

1. OIOS conducted an audit of air operations in the United Nations Mission in Sierra Leone (UNAMSIL) during October and November 2004. The audit was conducted in accordance with the standards for the professional practice of auditing in United Nations organizations.
2. The Mission's Air Operations Section (AIROPS) provides aviation support for the movement of personnel and cargo within and outside the Mission area. It also provides similar support to UNAMSIL's military operations. The Movement Control Section (MOVCON) plans, coordinates, and monitors the strategic movement of personnel, supplies and equipment by air and road within the UNAMSIL Mission area, as well as personnel, supplies and equipment by air and sea between troop contributing countries and UNAMSIL.
3. AIROPS managed a total of 23 aircraft - 22 helicopters and one fixed-wing aircraft. Fifteen (15) of the total aircrafts were acquired commercially. The remaining eight (8) helicopters were Government-owned provided on Letters of Assist. AIROPS had a budgetary allocation of \$14.4 million for the fiscal year 2004-2005. It consisted of three units: 1) Air Operations Center, 2) Technical Compliance/ Quality Assurance Unit, and 3) Airfield Management Unit. Its authorized staffing table for the 2004-2005 fiscal year consisted of 85 posts - 14 internationals, 51 national staff, and 20 United Nations Volunteers (UNVs).
4. MOVCON's operational budget for the fiscal year 2004-2005 amounted to \$0.4 million respectively. MOVCON consisted of two major Units: the Joint Movement Control and Coordination Unit (JMCC) which deals with planning, administrative, budgetary and procurement matters, and the Operations Unit which is responsible for the operational aspects of MOVCON activities. The Operations Unit has nine detachments at Mammy Yoko, Hastings Airport, Manifest Unit, Kenema Airfield, Conakry, Lungi Airport, Magburaka/Makeni, Koidu, and Freetown Seaport/Ferries. MOVCON's authorized staffing table for the 2004-2005 fiscal year consisted of 35 posts - 5 internationals, 19 national staff, and 11 UNVs.
5. The comments made by the Management of UNAMSIL on the draft audit report have been included in the report as appropriate and are shown in italics.

## **II. AUDIT OBJECTIVES**

6. The main objectives of the audit were to determine whether: (a) the Mission's aircraft fleet was utilized safely, efficiently, effectively, and economically; (b) human resources allocated to Movement Control Section (MOVCON) and Aviation Section (AIROPS) were adequate and utilized efficiently and effectively; and (c) AIROPS and MOVCON rendered adequate services and adhered to regulations, rules and procedures relating to their respective operations.

## **III. AUDIT SCOPE AND METHODOLOGY**

7. The review covered the period from 1 July 2003 to September 2004. Operations of AIROPS and MOVCON were documented using survey questionnaires. OIOS reviewed relevant documents pertaining to both operations, including contracts, operational procedures and administrative instructions, and visited Mammy Yoko, Lungi and Hastings AIROPS operation sites.

#### IV. OVERALL ASSESSMENT

8. OIOS found that the AIROPS and MOVCON generally carried out their activities satisfactorily. However, there were areas requiring improvement in the staffing of AIROPS and MOVCON, use of air assets, air safety and aircraft maintenance. Furthermore, the investigation of helicopter crash in Yengema on 29 June 2004 has not yet been completed.

#### V. AUDIT FINDINGS AND RECOMMENDATIONS

##### A. Use of air assets

###### The Organization opted for expensive aircraft contracts

9. The Mission contracted fifteen (15) aircrafts from four (4) companies: (1) Enimex; (2) Vetrical-T; (3) Nefty; and (4) UTAir. New contracts were signed as the old ones expired. Records in AIROPS showed that there were distinct differences between the old and new contracts in price structure. Under the old contract, costs to the Mission were aggregated on an annual basis. The annual costs under the old contract included a guaranteed minimum of 540 hours of flight time per year per aircraft, third party liability insurance, basic war risk insurance, full hull insurance, workmen's compensation insurance, crew and travel associated with crew rotation, maintenance, oil and lubricants. It also included an additional 480 flight hours, lodging, meals and local transportation for the crew at main operating base after the utilization of 540 hours flight time per year. Under the new contracts, costs to the Organization were itemized and were higher than the costs under the first contract.

10. The Organization paid \$12,782,680 or 71% more in the new price structure for 12 Mi8 MTV commercial aircrafts contracted from Neftey and UTAir. Neftey's annual costs for Mi8 MTV covering call signs UNO 095 and UNO 096 were \$1,404,000 each whereas those of UTAir's covering UNO 108 and UNO 109 were \$1,370,000 each for the same model aircraft. In the new price structure the costs increased by 17% to 165% for the same model aircrafts. The review also revealed that the companies offered lower prices when the number of aircrafts per contract increased. In the absence of old contract records for other call signs, OIOS applied these prices for all Mi8 MTV aircrafts received from these two companies and compared, as shown in Table 1 below, with prices under the new contracts.

**Table 1: Cost comparison between old and new contracts**

No.	Aircraft		Call sign	Costs/Contract (\$)		New Contract period	Difference \$	%
	Supplier	Type		Old	New			
1	Neftey	MI8 MTV	UNO 095	1,404,000	2,358,720	13/2/03 – 12/2/05	954,720	68
2	Neftey	MI8 MTV	UNO 096	1,404,000	2,358,720	13/2/03 – 12/2/05	954,720	68
3	Neftey	MI8 MTV	UNO 104	1,404,000	2,178,500	11/4/04 – 10/4/05	774,500	55
4	Neftey	MI8 MTV	UNO 105	1,404,000	2,178,500	11/4/04 – 10/4/05	808,500	59
5	UTAir	MI8 MTV	UNO 094	1,404,000	2,569,600	5/5/04 – 4/4/05	1,199,600	88
6	UTAir	MI8 MTV	UNO 106	1,404,000	2,569,600	5/5/04 – 4/4/05	1,199,600	88
7	UTAir	MI8 MTV	UNO 093	1,404,000	3,634,620	1/2/04 – 31/2/05	2,264,020	165
8	UTAir	MI8 MTV	UNO 098	1,404,000	2,725,000	1/7/03 – 30/6/05	1,355,000	99
9	UTAir	MI8 MTV	UNO 099	1,404,000	1,597,050	21/8/03 – 20/8/05	227,050	17

10	UTAir	MI8 MTV	UNO 119	1,404,000	1,597,050	21/8/03 – 20/8/05	227,050	17
11	UTAir	MI8 MTV	UNO 108	1,370,000	2,301,600	26/12/02 – 25/12/04	931,600	68
12	UTAir	MI8 MTV	UNO 109	1,370,000	2,301,600	26/12/02 – 25/12/04	931,600	68
	<b>Total:</b>			<b>17,946,000</b>	<b>30,728,680</b>		<b>12,782,680</b>	<b>71</b>

11. AIROPS explained that Procurement Division at Headquarters, New York was responsible for negotiating and finalizing these contracts. It however, believed that the increased number of peacekeeping missions in recent years and the limited availability of commercial aircraft globally might have contributed to higher costs.

Aircraft contracts allowed for more flight hours than required

12. Of the 23 aircraft on board, 15, including the fixed wing aircraft were contracted from companies. All the aircrafts were used for civilian purposes. The fixed wing aircraft was used for both passengers and cargo. Three of the 15 aircrafts which were M26T helicopters were used strictly for cargo while the remaining 12 M18 MVT helicopters were used for both passengers and cargo. The remaining eight (8) of the total aircrafts were Government-owned helicopters provided on Letters of Assist. Four (4) of them were used for both military and civilian purposes while the rest were used strictly for military purpose.

13. In order to ascertain whether UNAMSIL has achieved value-for-money in the use of aircraft, OIOS reviewed flight hours allowed in the contracts and compared with the actual flight hours utilized. The review revealed that the Mission did not use the flight hours permitted under the contracts in the case of at least six of the 15 aircrafts. UNAMSIL utilized only 39 to 86% of the flight hours allowed for these aircrafts, as shown in Table 2.

**Table 2: Capacity utilization of aircraft**

No	Operator	Call sign	Contract started	Contract ended	Flight hours allowed per year	Hours flown During the year	Capacity utilization (%)
1	Enimex	UNO 090	12/6/03	11/06/05	600	515.82	86.4
2	Vertical-T	UNO 092	13/4/03	12/4/05	960	667.79	69.56
3	Neftey	UNO 104	11/4/04	10/4/05	1100	428.93	39.0
4	UTAir	UNO 093	1/2/04	31/1/05	1020	617.36	60.5
5	UTAir	UNO 097	1/7/03	30/6/05	1000	593.91	59.4
6	UTAir	UNO 098	1/7/03	30/6/05	1000	467.05	46.7

14. The Aviation Section agreed that the allowed flight hours exceeded the required flight hours but believed that the number of the aircrafts was about right, as the Mission needed aircrafts on standby for emergencies or for use by VIPs, in addition to the routing operations including air lifting of rations and personnel. It was not responsible to schedule all aircrafts economically to exhaust all the allowed flight hours within the context of the Missions requirements. OIOS recognizes that some allowance has to be made for contingencies, but under-utilization of over 50% of available flight hours seems unjustifiable. OIOS believes that the Organization should renegotiate with the aircraft companies and explore other options in order to achieve better value-for-money.

## **Recommendation 1**

OIOS recommends that UNAMSIL Management examine the level of available flight hours in the contracts vis-à-vis the actual usage in order to reduce the number of aircraft deployed in the Mission and ensure best value for money for the Organization (AP2004/622/02/001).

15. *UNAMSIL Management accepted recommendation 1 and stated that the Mission had reduced the size of its aircraft fleet from 23 to 12 aircraft with effect from 1 January 2005. The current fleet consists of 1 fixed wing AN-72, and 11 helicopters (1 Mi-26, 6 Mi8s and 4 Mi-24s). Based on the action taken by the Mission, OIOS has closed recommendation 1.*

### **B. Air safety**

16. Safety is a key element of air operations. OIOS reviewed the responsibilities of various entities within UNAMSIL AROPS to ascertain the adequacy of the Mission's air safety control systems. Responsibility for the operational safety is shared between the Aviation Section and the Aviation Safety Officer while the physical safety is entrusted to the UNAMSIL Force Command and the Security Section. The Air Safety Officer monitors all aviation procedures and techniques as well as aircrafts in regard to potential safety hazards and advises the UNAMSIL Administration on air safety matters. The Technical Compliance Unit monitors compliance with the contract provisions concerning air safety.

#### Inadequate access control and taxiways at airfield and helipads

17. Terrorism is a major risk in air operations world-wide. Control of access to airfields is a key security measure to mitigate this risk. OIOS auditors visited the airfields at Hastings and Lungi to ascertain the adequacy of air safety arrangements.

18. The airfield at Hastings is shared by the UNAMSIL AROPS and contingents, Ukrainian Aviation Unit, Ukrainian Infantry Unit, Pakistani Aviation Unit, and Bangladeshi Engineering Unit. The airfield is patrolled by the Nigerian Contingent. The security of the entire complex, including the nearby UNAMSIL Vehicle Workshop was coordinated by a Committee consisting of representatives of the entities sharing the airfield and the UNAMSIL Security, and was chaired by the Nigerian Contingent. The security of the UNAMSIL aircraft at Lungi is looked after by the Nigerian and Ghanaian contingents. The helipad at Mammy Yoko was guarded by UN security during day time and by the Kenyan contingent at night. The area is well fenced by barbed wire.

19. During the site visit, OIOS observed that the barbed wire and security lights at Hastings were installed only in November 2004. Until then, aircrafts and other assets were at risk. Management was prompted to install them after recent thefts of air conditioning equipment from the control tower and fuel from aircrafts. Fuel thefts from aircraft were also reported to have taken place at Lungi through areas not protected by barbed wire.



## Recommendation 2

OIOS recommends that UNAMSIL Management investigate the alleged thefts of fuel at Lungi and Hastings expeditiously and put in place proper controls to prevent their recurrence (AP2004/622/02/002).

20. UNAMSIL Management accepted recommendation 2 and stated that to prevent fuel theft at Hastings, the Mission has erected an observation post and flood lights in and around the parking area. Gaps between hangars were sealed with barbed wire, and helicopters are no longer parked at the Lungi Airport. Based on the action taken by the Mission, OIOS has closed recommendation 2.

### Fire safety was given low priority

21. Fire fighting is a major responsibility of the Airfield Management Unit. It provides the service at Mammy Yoko (UNAMSIL Headquarters), Hastings and Kenema. The Unit trains firefighters and fire wardens, as well as conducts drills in conjunction with the UNAMSIL Security Section. The Unit also provides fire fighting service to the surrounding communities based on an MOU signed between UNAMSIL and the Host Government. Furthermore, the Unit carries out Sea Search and Rescue operations at UNAMSIL Headquarters. The Unit is also responsible for managing airfields and helipads. The Unit had a total of 18 staff and managed 435 helicopter landing sites in the Mission area of which 36 were frequently used. The Unit's tasks include controlling ramps to ensure the safety of personnel and aircrafts. It also trains military personnel assigned to airfields and helipads in the provinces on how to control ramps.

22. The fire protection service at the various locations was provided based on the risks associated at each location. The service was provided on a 24 hour-7 day basis at Mammy Yoko and Hastings where personnel and high value UN assets were concentrated. The service in Kenema was provided on an 8-hour/5-day basis, which was extended when required. The actual and proposed deployment of fire fighter posts is shown in Table 3 below.

**Table 3: Current and proposed deployment of fire fighter posts**

Station	Fire Accident on 2 September 2004				Proposed Fire Safety Staff as of 1 October 2004	
	Staff BEFORE the accident		Staff AFTER the accident		National Staff	Individual Contractor
	National Staff	Individual Contractor	National Staff	Individual Contractor		
UNAMSIL HQ	-	-	-	-	3	
Mammy Yoko	3	1	3	9	12	
Hastings	6	4	7	4	11	
Kenema	4	-	4	-	4	
<b>Sub-Total:</b>	<b>13</b>	<b>5</b>	<b>14</b>	<b>13</b>	<b>30</b>	
<b>Total:</b>	<b>18</b>		<b>27</b>		<b>30</b>	

23. Although no changes had taken place in respect of the level of the associated risks, UNAMSIL Management reduced the fire protection service at Mammy Yoko from 24 hours/7-days basis to 12-hours/7-days basis (7Am to 7 PM) effective 31 August 2004. The reduction of the service hours exposed personnel and UN assets at Mammy Yoko to fire accident risks. In two days from the day the new service hours went into effect, on 2 September 2004 at 8 pm a fire accident

occurred in one of the containers at the helipad. The fire was brought under control by off duty firefighters responding to calls at their residences. The damage could have been greater if the off duty firefighters had not come to the rescue.

24. The Aviation Section explained that the fire fighting service hours were changed due to the Mission drawdown that led to staff cuts. OIOS believes the 24-hours/7-days service should have been maintained as a priority service at the Mammy Yoko site. Subsequent to the fire accident at the Mammy Yoko Helipad, UNAMSIL Management decided to reinstate the 24-hours/7-days operation of the fire protection service at Mammy Yoko. To that end, it authorized nine additional staff increasing the strength to 27 fire fighters against the proposed requirement of 30 national staff posts. However, the additional staff included eight individual contractors.

25. The use of individual contractors was not efficient because of the periodic break-in-service requirement that the arrangement entails. Additional costs are incurred for the recruitment and training of replacement staff during the period when the individual contractors go on break-in-service. Furthermore, it is also difficult to schedule them all year round on a 24-hour/7-days basis.

### **Recommendation 3**

OIOS recommends that UNAMSIL Management reassess the requirement of national staff posts vis-à-vis individual contractors in the Airfield Management Unit in order to enhance its firefighting capability on 24 hours 7 days basis at Mammy Yoko (AP2004/622/02/003).

26. *UNAMSIL Management accepted recommendation 3 and stated that Hastings airfield and Mammy Yoko Headquarters are covered on a 24-hrs/7-days basis. The Personnel Section is exploring the possibility of replacing the 10 contractors out of the 31 fire fighters in the Fire Unit by national staff.* Based on the Mission's response, OIOS has closed recommendation 3.

#### Lack of adequate training for air safety staff

27. The tasks of air safety staff are complex in a field with rapid technological changes. As such, they need to undergo continued training to keep up with the changing requirement. In line with the International Civil Aviation Organization (ICAO) guidelines, the UNAMSIL Aviation Safety Manual recommends sufficient training for aviation safety personnel.

28. Two independent entities – the Air Safety Officer who directly reports to the Director of Administration, UNAMSIL and the Technical Compliance Unit which reports to Chief, Aviation Section – monitor air safety. The tasks of the Air Safety Officer include inspecting aircrafts, making all related arrangements to ensure the safety of the Mission's air operations, liaising with related Government Agencies on aviation safety matters and advising Management on air safety matters. The Technical Compliance Unit is responsible for ensuring compliance with aircraft safety provisions provided in the contracts, including aircraft periodic maintenance, air crew qualification, and usage of flight hours.

29. To ascertain whether the relevant personnel were receiving the required training, OIOS interviewed Aviation Section staff and reviewed the relevant documents. It was found that the training they received was inadequate. For instance, the Mission provided only one training to the

Air Safety Officer in the last three years, while the requirement was for two training sessions of at least three weeks each in well-recognized institutions. Budgetary constraint was given as a reason for not providing the necessary training. OIOS is concerned that lack of training may impact on the Mission's capability to ensure its air operations' safety.

**Recommendation 4**

OIOS recommends that UNAMSIL Management provide the staff of the Aviation Safety Unit and Technical Compliance Unit with adequate training in order to update their technical skills and to monitor the safety of UNAMSIL air operations (AP2004/622/02/004).

30. *UNAMSIL Management accepted recommendation 4 and stated that the Chief of Technical Compliance Unit would attend an external training course in Geneva and the Flight Safety Officer would be traveling to Los Angeles for undergoing training in flight safety. Based on the Mission's response, OIOS has closed recommendation 4.*

**C. Aircraft maintenance, staffing and equipment**

Scheduled periodic maintenance inspections were not undertaken

31. The importance of periodic maintenance work and crew qualification cannot be overemphasized. Both these requirements were specified in the relevant aircraft contracts. The Technical Compliance Unit of the Aviation Section is responsible for ensuring compliance with the standard requirements on maintenance and certification of actual schedules for each aircraft. OIOS randomly selected six of the 15 (or 40%) civilian aircrafts in the Mission and examined relevant records for the period from January to September 2004 to determine whether the air crew qualifications and the maintenance standards were complied with. As shown in Table 4 below, there were lapses in undertaking scheduled aircraft maintenance inspections.

**Table 4: Planned and Actual Monthly Aircraft Maintenance**

Aircraft	No. of Planned(P) and Actual (A) Maintenance for the year 2004										No Maintenance
	January		March		May		July		September		
	(P)	(A)	(P)	(A)	(P)	(A)	(P)	(A)	(P)	(A)	
UNOO90	3	3	3	3	3	0	3	0	3	3	May, July
UNO095	5	5	5	5	5	5	5	5	5	4	4/5 in September
UNO105	-	-	-	-	2	2	2	2	3	3	On board: April
UNO093	-	-	3	2	3	2	3	4	3	3	On board: Feb.; 2/3 in March and May
UNO099	3	3	3	3	3	2	3	3	3	3	2/3 in May
UNO109	5	5	3	5	5	4	5	5	5	5	4/5 in May

32. The review found no irregularities in respect of the aircrew qualifications. However it revealed that some scheduled maintenance work was not done aircrafts in a consistent manner. While each aircraft is scheduled to undergo maintenance work three to five times a month depending on the number of hours it flew, scheduled maintenance work was not done on the fixed wing aircraft (UNO090) in May 2004 and July 2004. OIOS is concerned in particular that the

serving of the passenger plane was missed exposing potential passengers to risks. The Aviation Section explained that the aircrafts might not have flown the minimum hours required to undergo the servicing, but provided no documentation to support it. It should be documented for audit trail when scheduled maintenance work is not done due to lower flight hours than required.

### **Recommendations 5 and 6**

OIOS recommends that UNAMSIL Management:

- (i) Implement scheduled maintenance of all aircraft to ensure their safety (AP2004/622/02/005); and
- (ii) Document reasons for any failure to comply with planned maintenance work and take necessary follow-up actions (AP2004/622/02/006).

33. *UNAMSIL Management accepted recommendation 5 and stated that a monthly maintenance plan is already in existence. Recommendation 5 remains open pending receipt of documentation from the Mission showing the implementation of this maintenance plan. UNAMSIL Management also accepted recommendation 6 and stated that the Technical Compliance Unit had been instructed to track planned and conducted maintenance work, and to take the necessary follow-up actions. Recommendation 6 remains open pending confirmation by UNAMSIL that this procedure has been implemented.*

### Inadequate staffing and equipment for control towers

34. OIOS' review of staff resources and its observation of the control tower at Hastings disclosed that there was a need for additional resources. While one UNAMSIL staff and three Government employees had been assigned to man the tower, the latter were absent during OIOS' visit and, according to the UNAMSIL staff and the airfield manager, they rarely report to duty. There was no evidence that UNAMSIL officials met with the relevant Government agency to foster cooperation in this regard. Therefore, the tower can be without an air controller when the Government employees or the UNAMSIL do not report to duty. The AIROPS official explained that it was not essential to man the control tower at all the times as the tower is responsible for providing only advisories on air traffic whereas the airport in Lungi functions as the main control tower. OIOS believes, however, that the control tower in Hastings should be manned adequately even though its functions are limited to providing traffic advisories.

35. OIOS also found that the communication radios that AIROPS used needed upgrading. The high frequency (HF) radios currently in use are inefficient and unclear. There was no evidence that the Mission placed a requisition to upgrade HF radios with VHF for cross country flights to maintain clear communication between air traffic controllers, flight followers and air crews. Furthermore, the air traffic service is not equipped with tape recorders. The Aviation Section informed OIOS that tape recorders were recommended but not mandatory under international aviation standards.

### **Recommendations 7 and 8**

OIOS recommends that UNAMSIL Management:

- (i) Review personnel requirements at the Hastings air control tower to ensure air traffic safety with uninterrupted advisories (AP2004/622/02/007); and
- (ii) Reexamine the suitability of the communication radios that the Aviation Section is using with a view to upgrading them if necessary (AP2004/622/02/008).

36. UNAMSIL Management accepted recommendation 7 and stated that it has planned to post an additional air traffic controller at Hastings Tower. Recommendation 7 remains open pending confirmation by the Mission that this has been done. UNAMSIL Management also accepted recommendation 8 and stated that new radio equipment has been selected, which would be installed soon. Recommendation 8 remains open pending confirmation by UNAMSIL that the radio equipment has been installed.

**D. Staffing of the Aviation Section**

Authorized posts were not utilized

37. To ascertain the adequacy of the Aviation Section’s staffing, OIOS compared the Section’s staff on board with the authorized posts for the 2004-2005 fiscal year. As shown in Table 5 below, the comparison revealed a significant disparity between the two. Furthermore, there was a discrepancy in authorized strength according to the records of the Personnel Section and the Budget Section. The Aviation Section had a total 59 staff against 85 authorized posts, and it believes that all authorized posts were needed to support its operational requirements.

**Table 5: Aviation Section’s authorized posts and actual staff by category for the fiscal year 2004-2005**

Category	2004-2005 Fiscal Year		
	Authorized strength		Actual Incumbency As of April 2004
	According to Budget Section	According to Personnel Section	
International	14	14	7
National	51	25	36
UNVs	20	20	16
<b>Total:</b>	<b>85</b>	<b>59</b>	<b>59</b>

38. According to the UNAMSIL Personnel Section the discrepancies between authorized posts and actual staff were not unique to the Aviation Section, but a phenomenon that was affecting most of UNAMSIL in the implementation of the Mission’s drawdown. Furthermore, the authorized number of posts was budgeted within an in-built 10% vacancy rate. Another factor contributing to the disparity is the time required in filling the vacant posts, which were often redeployed between budget components for operational reasons. OIOS has taken note of the post movements as it allows flexibility to programme managers in post management. However, in the absence of baseline information on authorized posts and their redeployments, OIOS is concerned that such practice could lead to mismanagement of posts and affect operations.

## **Recommendation 9**

OIOS recommends that UNAMSIL Management reflect authorized posts and current post incumbency accurately to enhance transparency and to minimize discrepancies between authorized and actual posts in the Air Operations Section (AP2004/622/02/009).

39. *UNAMSIL Management accepted recommendation 9 and stated that in cooperation with the Personnel Office, the Aviation Section is striving to resolve the discrepancies between authorized and actual posts in the Section. Recommendation 9 remains open until confirmation is received from the Mission that the discrepancies have been resolved.*

### **F. Movement Control**

40. UNAMSIL's MOVCON supports air, surface and sea transport that the Mission uses for personnel and cargo movements within and outside the Mission area. As part of its functions, MOVCON plans, coordinates, and monitors the movement of personnel, supplies and equipment within, to and from the Mission area.

#### Lack of certified personnel to handle dangerous goods

41. UNAMSIL's MOVCON is responsible for moving a range of cargo by land, sea and air. A large portion of the cargo comprises dangerous goods such as bombs and ammunition. Therefore, MOVCON is required to have certified personnel for handling dangerous goods for transport by air and sea under the International Air Transport Association (IATA) and the International Maritime Dangerous Goods (IMDG) safety regulations. Failure to meet this requirement can put lives and assets at risk and cause the Organization to incur liability for any incidents involving cargo dispatched by sea or air.

42. OIOS' review of MOVCON's operations revealed that it did not have certified staff that can accept and document dangerous cargo for movement by sea. While the Mission is in the process of repatriating contingents, lack of qualified staff for handling dangerous goods for sea transport can hamper the drawdown process and incur financial liability from claims on possible incidents.

43. OIOS has taken note of correspondence between the Chief of MOVCON on one hand, and Integrated Support Services and the Personnel Section on the other, to arrange for certification of UNAMSIL staff with both IATA and IMDG. The review of the correspondence indicates that MOVCON had been asking for training of its staff both for operational reasons and for compliance with international standards. The requests included arranging training courses at the Mission as well as sending some MOVCON staff to the United Nations Mission in Liberia (UNMIL) where the courses are offered during the period 22-26 November 2004 and 6-8 December 2004. MOVCON did not receive a reply with regard to the requests for training in air operations while the request on the training for compliance with the international standards was declined. OIOS is concerned about the negative consequences of the absence of skilled personnel in handling dangerous goods for the Mission's drawdown process, which has already commenced.

## Recommendation 10

OIOS recommends that UNAMSIL Management provide resources for training MOVCON personnel responsible for handling dangerous goods on an urgent basis to ensure the safety of personnel and assets and to protect the Mission against possible liability in the event of an incident (AP2004/622/02/010).

44. *UNAMSIL Management accepted recommendation 10 and stated that necessary action would be taken.* Recommendation 10 remains open pending receipt of evidence from the Mission that it has been fully implemented.

### Discrepancy in the number of authorized posts in MOVCON for 2004-2005

45. During the fiscal year 2004-2005, MOVCON was authorized 35 posts according to the Budget Section whereas the records in the Personnel Section showed 51 authorized posts. The Budget Section's figures included 5 international posts, 19 nationals and 11 UNVs while the Personnel Section's figures showed 5 international posts, 35 nationals and 11 UNVs. However, as shown in Table 6 below, MOVCON has an actual incumbency of 68 staff as of 1 April 2004 with 10 internationals, 44 nationals and 14 UNVs.

**Table 6: MOVCONs' authorized posts and actual staff by category for the fiscal year 2004-2005**

Category	2004-2005 Fiscal Year		
	Authorized strength		Actual Incumbency
	According to Budget Section	According to Personnel Section	As of April 2004
International	5	5	10
National	19	35	44
UNVs	11	11	14
<b>Total:</b>	<b>35</b>	<b>51</b>	<b>68</b>

46. In reference to the discrepancies in Table 6, MOVCON explained that the figures provided by Personnel Section were more in line with its operational requirement. OIOS also noted that the actual number of posts in MOVCON was greater than those authorized for it because of the increased workload resulting from the Mission's drawdown exercise.

47. In the meantime, MOVCON expressed concern about the lack of a deputy to assist with administrative matters, explaining that the need for the post was particularly critical during the drawdown period. OIOS was further informed that MOVCON was allocated a P-3 post for this purpose and a suitable candidate was also identified but was subsequently withdrawn. The Personnel Section explained that the post was deployed to the Engineering Section based on a more pressing operational requirement there. Notwithstanding failure by MOVCON to provide job descriptions of the MOVCON's Chief and her deputy, OIOS is concerned that the lack of second-in-command may hamper administrative capacity of MOVCON thereby affecting the efficiency of the drawdown process.

### **Recommendation 11**

OIOS recommends that UNAMSIL Management reconcile the discrepancies between MOVCON's authorized and actual posts and examine the adequacy of its current staffing resources to support its operational requirements (AP2004/622/02/011).

48. *UNAMSIL Management accepted recommendation 11 and stated that it was striving to address the discrepancies between the authorized and the actual posts in the MOVCON Section in cooperation with the Personnel Section. Recommendation 11 remains open pending confirmation by the Mission that the discrepancies have been resolved.*

#### **E. Investigation of the helicopter crash in Yengema**

The pilot in command was not familiarized with the Mission area topography

49. A UNAMSIL MI8 MTV helicopter bearing call sign UNO-91 crashed on 29 June 2004 in Yengema. The accident occurred at about 0940 hours, 7 minutes before its scheduled landing at the Yengema helipad. It was carrying 24 people, a crew of three and 21 passengers. There were no survivors. According to the information made available to OIOS, the aircraft was leased from UTAir and began operation in the Mission on 4 April 2004. The helicopter was not known to have experienced any technical problems prior to the accident. The crew had the proper qualifications to operate the aircraft. The Captain, Mr. Andrey Sokov had been reported to have received refresher course on MI8-MTV helicopter in the Russian Federation from 2 to 28 February 2004.

50. However, a review of the relevant documentation showed that Mr. Andrey Sokov arrived at Freetown on 26 June 2004 and was new to the Mission area. Flight MI8 MTV helicopter bearing call sign UNO-91 was his first command in the Mission area. The aircraft crashed into a foggy mountain covered with dense forest. Interviews with the Aviation Safety Officials whose tasks included briefing crews on safety matters revealed that the pilot was not briefed on safety matters in the Mission area. The Aviation Safety official informed OIOS that he was not informed of the pilot's arrival.

### **Recommendation 12**

OIOS recommends that UNAMSIL Management institute a procedure requiring new pilots to familiarize themselves with the physical topography of the Mission area and the country as a standard safety procedure before flying Mission aircraft (AP2004/622/02/012).

51. *UNAMSIL Management accepted recommendation 12 and stated that the Chief Air Operation Center briefs all crew members upon their arrival at the Mission area. Based on the Mission's response, OIOS has closed recommendation 12.*

Search and Rescue Team was unprepared

52. Search and Rescue teams must always be prepared for the unexpected. Carrying emergency equipment such as fire extinguishers is the least they are expected to bring to aircraft crash scenes.



According to documentation made available to OIOS, the Military Search and Rescue team arrived at the accident scene without fire extinguishers. As a result, four bodies at the crash scene were left burning for four hours.

### **Recommendation 13**

OIOS recommends that UNAMSIL Management equip Search and Rescue teams with necessary safety equipment including fire extinguishers enabling them to respond to accident sites and provide required emergency services effectively (AP2004/622/02/013).

53. *UNAMSIL accepted recommendation 13 and stated that Search and Rescue teams are equipped with necessary equipment including power hydraulic tools, fire extinguishers, radios and GPS receiver.* Based on the Mission's response, OIOS has closed recommendation 13.

#### Accident was not investigated expeditiously

54. The DPKO Air Safety Manual requires that accidents are reported to the relevant authorities immediately and investigated expeditiously. This requirement is consistent with international aviation standards including ICAO standards which UNAMSIL subscribes to. These requirements are more seriousness when the accident involves loss of lives. OIOS sought to ascertain whether these requirements were complied with and found that the investigation had not been completed even after more than five months from the date of the accident.

55. According to ICAO, the Government of the country where the accident happens investigates the crash. If the Government is unable to do so, the Government of the country where the aircraft was registered takes over the responsibility. The investigation was delayed because the Government of Sierra Leone could not undertake this investigation due to lack of resources and the technical know-how and would not allow the Russian Government to do it either.

56. Records indicate that the Government of the Russian Federation was prompt in responding to the accident expressing its willingness to cooperate in the investigation. A team of Russian investigators arrived at the scene on 2 July 2004. They were part of the team involved in the removal of wreckage from the crash site and the assembly of aircraft parts at the Wellington UN Warehouse. However, the team left Sierra Leone on 16 July upon the insistence of the Government of Sierra Lone that the Government itself would conduct the investigation.

57. Nevertheless, on 20 August 2004, after a lengthy exchange of correspondence and meetings with UNAMSIL Management, the Government finally agreed to let the Government of the Russian Federation conduct the investigation. On 7 September 2004, the Russian Government asked UNAMSIL for the documentation to initiate the investigation. On 9 September UNAMSIL asked DPKO for permission to release the documents and the permission was granted on 21 October DPKO. On 27 October 2004 the documents along with the Global Positioning System (GPS) and the Flight Data Recorder were dispatched to the Government of the Russian Federation. UNAMSIL Safety Unit estimated that the investigation would be completed by February 2005.

#### **Recommendation 14**

OIOS recommends that UNAMSIL Management expedite the investigation of the helicopter accident at Yengema of 29 June 2004 (AP2004/622/02/014).

58. *UNAMSIL Management accepted recommendation 14 and stated that the Air Safety Officer and UNAMSIL Administration were following the progress of the investigation. Recommendation 14 remains open pending receipt of documentation from the Mission to show that the investigation has been completed.*

#### **VI. ACKNOWLEDGEMENT**

59. We wish to express our appreciation to the Management and staff of UNAMSIL for the assistance and cooperation extended to the auditors during this assignment.

A handwritten signature in cursive script that reads "P. Azarias". The signature is written in black ink and is positioned above the printed name and title.

Patricia Azarias, Director  
Internal Audit Division-I, OIOS