

UN Development Programme

Barbados - Bridgetown

Donor

Total Budget

Award Total

Total Expenditure

Unprogrammed/Unfunded

MPU

Award ID:

00038816

Award Title:

RMP: TAS FOR MAC AND END

USERS

Start Year:

2005

End Year:

2007

Implementing Partner

(Executing Agency):

National Execution

Responsible Party

(Implementing Agent):

BAR-Government of Barbados

Revision Type:

Initial Project Approval

Brief Description:

The aim of the Technical Assistance Project, envisioned as a component of the Barbados' Refrigerant Management Plan (RMP), is to enable and encourage the refrigeration service sector to undertake retrofits of refrigeration and air-conditioning equipment to employ HCFC or HFC refrigerants and a Mobile Air-Conditioning.

Agreed by:

Bentley Gibbs

P.S. Economic Affairs

Budget (US\$) as of 08-February-2005

Fund

63030 MP Prog Res Gen Prog

Amount

172,611.00

172,611.00

172,611.00

0.00

0.00

Agreed by:

Agreed by:

Agreed by:

Rosina Wiltshire

Resident Representative

Date

MAR 0 8 2005

ANNEX II PROJECT PROPOSAL

BARBADOS COUNTRY:

Technical Assistance Project PROJECT TITLE:

UNDP IMPLEMENTING AGENCY: PROJECT IN CURRENT BUSINESS PLAN: Yes

SECTOR COVERED: Refrigeration and MAC

Refrigeration and MAC Service and Mobile Air-SUB-SECTOR

Conditioning

ODS USE IN SECTOR:

Baseline (Average 1995-1997): 21.5 ODP Tonnes/year

11.75 ODP Tonnes **Current (2002):**

6.33 ODP Tonnes (3.165 ODP Tonnes/year) PROJECT IMPACT:

2 1/2 Years (1st January 2007- Decision 32/10) PROJECT DURATION:

PROJECT COST:

US\$ 162,010.00 **Incremental Capital Cost** Contingency US\$ 10,601.00

US\$ 172,611.00 **Total Project Cost**

100% LOCAL OWNERSHIP:

US\$ 172,611.00 REQUESTED GRANT:

IMPLEMENTING AGENCY SUPPORT COST: US\$ 15,534.99 (9%) US\$ 188,145.99

TOTAL COST OF PROJECT TO MLF:

STATUS OF COUNTERPART FUNDING: N/A

N/A (US\$27.27/kg) **COST-EFFECTIVENESS:**

PROJECT MONITORING MILESTONES: Included (Periodic Reports)

NATIONAL COORDINATING BODY National Ozone Unit

PROJECT SUMMARY

The aim of the Technical Assistance Project, envisioned as a component of Barbados's Refrigerant Management Plan (RMP), that is being presented for consideration at the 43rd Meeting of the Executive Committee of the Multilateral Fund, is to implement a Retrofit Training Programme, to enable and encourage the refrigeration service sector to undertake retrofits of refrigeration and air-conditioning equipment to employ of HCFC or HFC refrigerants, and a Mobile Air-conditioning (MAC) Retrofit Equipment and Recovery and Recycling (R&R) Programme, to encourage the retrofit of CFC-12 MAC units to HFC-134a and to supply retrofit tools and equipment, including MAC R&R machines, to the MAC service sector. Training Workshops for MAC service technicians will be held to familiarise these with the RMP, MAC Retrofit Procedures and the Equipment and R&R Programme. The co-ordination of the Technical Assistance Project and the overseeing of the monitoring of the RMP, with periodic reports, as provided for within the RMP, will be carried out by the National Ozone Unit (NOU).

IMPACT OF PROJECT ON BARBADOS'S MONTREAL PROTOCOL OBLIGATIONS Reduction of the consumption of CFC refrigerant by 6.33 ODP tonnes (3.165 ODP tonnes/year).

1. BACKGROUND

Barbados acceded to the Vienna Convention and the Montreal Protocol on 16th October 1993. Barbados ratified the London and Copenhagen Amendments on 20 July 1994 and the Montreal and Beijing Amendments on 12 December 2002.

The 11.75 ODP tonnes of Annex A Group 1 ODS consumed in Barbados during 2002 was employed entirely and exclusively by the refrigeration service sector and included 1.95 ODP tonnes, 8.30 ODP tonnes (71%) of CFC-12 and 1.50 ODP tonnes of CFC-115 (4.4 Mtonnes of R-502). Virtually all of this CFC consumption can be attributed to replenishment after leaks and the purposeful venting before and during servicing activities, such as repairs, maintenance, leak detecting and the flush-cleaning of refrigeration and air-conditioning (R&A/C) equipment and installations or MAC units.

Presently, retrofits of CFC based R&A/C equipment and installations or MAC units to employ HCFC or HFC refrigerants is not being undertaken, owing to a lack of knowledge concerning the correct procedures to be followed.

The greater proportion of this consumption of ODS is the employment of CFC-12 in the servicing of vehicles fitted with MAC, including replenishment of the refrigerant charge after leakage. While most of the MAC units are found in passenger cars, other vehicles, such as pick-ups, delivery vans, refrigerated trucks and buses are also airconditioned.

The Department of Transport has reported that in 2002 there were 87,700 registered passenger cars and approximately 12,000 refrigerated trucks, mini-buses, buses, coaches and commercial goods vehicles presently on the roads of Barbados. MAC Service Centres and other sources report that 80% (70,160) of these incorporate MAC and that 40% (28,064) of the MAC units being serviced employed CFC-12.

Without any interventions and considering a MAC unit's minimum operative useful life-time of 15 years, the estimated reduction and remaining quantities of ODS based MAC units would be as given in the table below. It should be noted that many MAC units could more likely to be given a useful working life of up to 20 years.

	2002	2005	2007	2010
Percentage of vehicles with CFC-12 MAC that were still on the road in 2002	100%	70%	50%	20%
CFC-12 Mobile Air-conditioning units in active service (15 years old)	28,064	19,645	14,032	5,613

One can see that a substantial proportion of the quantity of MAC equipment, present in 2002, will continue to exist by the year 2010.

A survey of MAC service centres indicates that, due to climatic conditions and poor roads in Barbados, the servicing of MAC units is necessary, on average, every two years. It is estimated that in 60% of the cases, the unit would require a replacement of 0.2 kg due to leakage and that in 40% a full charge of at least 0.8 kg would be required.

In 2002, of the 8.30 ODP tonnes of CFC-12 refrigerant consumed by the service sector 6.17 ODP tonnes were employed in the servicing of MAC and other transport and 2.13 ODP tonnes of CFC-12 were consumed in the servicing of domestic, commercial and industrial refrigeration equipment. If immediate action were not to be taken, the ability to satisfy the future servicing needs for the remaining equipment will be seriously effected by Barbados's compliance of MP phase-out schedules for 2007 and 2010 and might even compromise this by encouraging illegal imports.

Training for refrigeration technicians is carried out at the Samuel Jackson Prescod Polytechnic (SJPP). They not currently offering a course on the retrofitting of R&A/C equipment or MAC units, as part of their curriculum.

2. PROJECT OBJECTIVES

The Technical Assistance Project's objectives are:

- Achieve an ever more accurate inventory of ODS based commercial and industrial refrigeration and airconditioning installations and their equipment and of the number of vehicles with ODS based MAC units.
- Diffusion in Barbados of information to R&A/C and MAC service enterprises, R&A/C end-users and vehicle owners concerning the feasibility and technology for undertaking retrofits.
- Provide advice and training in the correct procedure for the retrofitting of R&A/C equipment from CFC to HCFC or HFC refrigerant.
- Provide advice and training in the correct procedure for the retrofitting MAC units from CFC-12 to HFC134a refrigerants and the employment of the MAC service equipment provided through the Technical Assistance Project.
- Provide training on recovery and recycling during the servicing of MAC.
- Provide 20 MAC R&R machines and other ancillary tools and equipment necessary to the undertaking of a correct retrofit.
- Provide 1 MAC R&R machine and other ancillary tools and equipment necessary for the training in correctretrofitting of MAC units to the SJPP.

Though the above mentioned activities might appear to be independent, they will need to be carried out simultaneously.

3. PROJECT JUSTIFICATION

This Technical Assistance Project is to be an integral part of the overall Refrigerant Management Plan (RMP) that has been prepared by the Government of Barbados and is being presented for consideration at the 43rd Meeting of the Executive Committee of the Multilateral Fund. One of the first priorities of this is to stop the discharge of CFC refrigerants into the atmosphere, due to leaks and servicing emissions. In order to achieve this, the Government is incorporating, within the RMP, this Technical Assistance Project for the R&A/C and MAC service sectors, incorporating Training Workshops on retrofitting, MAC service equipment and MAC R&R machines, presented herewith.

In order to meet the Montreal Protocol requirements as to the freeze and subsequent reduction of ODS consumption, all the traditional importers of CFC refrigerants have been identified and will be registered and will require permits, that will be restricted to diminishing annual quotas.

During the preparation of this Technical Assistance Project a survey was carried out, under the supervision of the NOU, of R&A/C and MAC service enterprises situated in the principal commercial and industrial areas of Barbados. From this it has been estimated that there are some 200 technicians employed in the R&A/C service sector and a further 100-150 undertaking informal repair work of domestic appliances and MAC units The survey showed that there were 20 formal MAC servicing enterprises and approximately 25 additional enterprises or garages working in the informal MAC service sector.

Of the 2002 consumption of CFC-12 of 8.30 ODP tonnes, 6.17 ODP tonnes (74%) is calculated as being employed in the servicing of MAC and other transport and 2.13 ODP tonnes (26%) as being employed in the servicing of domestic (1.125 ODP tonnes). The remainder CFC refrigerant (4.435 ODP tonnes) is calculated as being employed in the servicing of industrial and commercial R&A/C.

It could be expected that, of the CFC-12 employed in servicing MAC, more than 50% (3.08 ODP tonnes) could be for replenishment, as a result of leakage experienced prior to entering the service shop. If this were the case and as it would generally have been due to external factors, such as age and engine vibrations, the training of MAC service technicians in better servicing practices, that is also envisioned within this Technical Assistance Project, will probably have little effect upon this consumption need.

In Barbados the price of CFC-12 refrigerant (about US\$5/kg) has risen steadily in recent years and is presently converging on that of HFC-134a (about US\$10/kg). It is to be assumed that, due to the import controls that will be introduced by the Government and increased world-wide restrictions in supply of CFC-12, this tendency will continue and in the near future, HFC-134a could become the more economical of the two.

On account of the above, a Technical Assistance Project, incorporating a R&A/C Retrofit Training Programme and a MAC Retrofit Equipment and R&R Programme, is being proposed. Its duration would be extended throughout 2006.

Under the R&A/C Retrofit Training Programme a Training Workshop will be conducted to familiarise R&A/C technicians in retrofitting

Under the MAC Retrofit Equipment and R&R Programme, 20 MAC servicing enterprises would each be supplied with a MAC R&R machine and a set of tools and equipment suitable for conducting retrofits of MAC units from CFC-12 to HFC-134a, in order to encourage this practice and to assure that they are undertaken and completed correctly.

The MAC Retrofit Equipment and R&R Programme will supply MAC R&R machines and ancillary equipment in order to permit and encourage the recovery and recycling of CFC-12 refrigerant by the MAC service sector.

Training Workshops will be conducted to familiarise MAC technicians in retrofitting, correct employment of service equipment and the recovery and recycling of refrigerant.

Training of refrigeration technicians is carried out at the Samuel Jackson Prescod Polytechnic (SJPP). The project will supply 1 MAC recovery and recycling machine and 1 set of retrofit tools and equipment to the SJPP to allow a course on the retrofitting of MAC to be included as part of their curriculum.

4. END RESULT

This Technical Assistance Project will result in encouraging R&A/C service enterprise to recommend that end-users retrofit their installations and equipment and in a reduction of present CFC-12 consumption due to purposeful service leaks, brought about by a lack of correct tools and equipment during the servicing of MAC units. The recovery of refrigerant prior to servicing or maintenance operations and the reuse of the refrigerant after recycling will permit a reduction in the amount presently being purchased by the MAC service sector, leading indirectly to a further decrease in overall national consumption. Due to correct training in retrofitting and the purchase and distribution of pertinent tools and equipment, it is expected that the MAC service enterprises will be encouraged to urge vehicle owners to convert their MAC units to employ HFC-134a.

It is expected that within two years this Technical Assistance Project could encourage the retrofitting of commercial or industrial equipment and installations that would have caused a permanent effect on national ODS consumption of 2.00 ODP tonnes (1.00 ODP tonnes/year).

It is expected that within two years this Technical Assistance Project could encourage the retrofitting of the CFC-12 MAC units of 1,500 vehicles that would cause a permanent effect on national ODS consumption of 0.33 ODP tonnes (0.165 ODP tonnes/year).

It is also expected that this Technical Assistance Project, due to the reduction in servicing emissions brought about by the employment of correct tools and equipment, better servicing practices learnt from the training workshops and reuse of CFC-12 refrigerant resultant from the employment of recovery and recycling by the MAC service sector, could have a permanent effect on ODS consumption of a further 4.00 ODP tonnes (2.00 ODP tonnes/year).

In consequence, it is expected that this Technical Assistance Project will, in total, have a permanent effect on imported ODS consumption of 6.33 ODP tonnes (3.165 ODP tonnes/year).

Indirectly, the Technical Assistance Project will assist the Government to meet its scheduled ODS consumption phase-out commitments for 2005 and 2007 and obtain a complete phase out of the ODS consumption by 2010.

All the MAC recovery and recycling machines purchased will be capable of being converted, with a field service kit, to allow their employment with HFC-134a, at a later date.

5. PROJECT ACTIVITY

The Technical Assistance Project includes seven basic components.

- Information dissemination.
- Training in R&A/C retrofitting.
- Training in MAC servicing and retrofitting.
- Training in MAC recovery and recycling.
- Equipping of participating MAC service centres.
- Equipping of the refrigeration department at SJPP
- MAC Recovery and Recycling Programme.
- Monitoring activities.

The Technical Assistance Project incorporates a R&A/C Retrofit Training Programme and a MAC Retrofit Equipment and R&R Programme.

The first component of the Technical Assistance Project focuses on training R&A/C service enterprises in Barbados concerning the retrofitting of R&A/C equipment.

The second component of the Technical Assistance Project focuses on informing MAC servicing enterprises in Barbados concerning the existence of the MAC Retrofit Equipment and R&R Programme.

The third component will assure that participating MAC service centres are correctly equipped and are supplied with tools and equipment adequate for conducting retrofits and CFC-12 MAC recovery and recycling units.

The fourth component will be the holding of a training workshop by an international consultant to assure that the participating enterprises are correctly trained in MAC servicing and retrofit procedure.

The fifth component will be the holding of a training workshop by an international consultant to assure that the participating enterprises are correctly trained in the correct employment of the MAC recovery and recycling machines and related good practices.

The sixth component will be the facilitating to the SJPP of a MAC R&R machine and retrofitting tools and equipment for the training of MAC service technicians.

The seventh component consists of the initiation of recovery and recycling activities by the selected MAC service enterprises.

The eighth component consists of the monitoring of the Technical Assistance Project.

Though management of the Technical Assistance Project, the R&A/C Retrofit Training Programme and the MAC Retrofit Equipment and R&R Programme will be the overall responsibility of the NOU, the monitoring of the amounts of refrigerant recovered and recycled will be conducted by a national consultant contracted under the a specific Monitoring Project that is a component of the RMP.

The NOU will assure the timely changing of the recycling filters incorporated in the MAC R&R machines.

6. PURCHASE OF EQUIPMENT

It has been noted that virtually none of the MAC service centres or garages that could carry out retrofits are correctly equipped to assure that the retrofit operations would be undertaken with a complete recovery of the CFC-12 or the use of other good servicing practices. To assure that MAC retrofits are carried out correctly, 20 MAC recovery/recycling machines and ancillary equipment and tools will be purchased and supplied to the service enterprises as an integral part of the Technical Assistance Project.

Each MAC service centre or garage participating in the MAC Retrofit Equipment and R&R Programme will be provided with:

1, CFC-12 MAC recovery/recycling/evacuation/charging machine incorporating an OFP device and with capacity to fill automatically in one single pass and a continuous process an internal or external cylinder. The unit will incorporate an oil separator, 2 independent filters (1 for acid and 1 for moisture), automatic purging of

non-condensable gases, an hour counter and appropriate refrigerant gauges and hoses. The machine will be capable of being field converted to recycle HFC-134a, using a factory-supplied kit

- 1, portable multi-refrigerant analyser to identify recovered refrigerants as well as the proportional content of refrigerant mixtures and to assure that only CFC-12 is processed by the recycling machine
- 1, DOT standard refillable 50-lb. CFC-12 refrigerant cylinder with two ports and an OFP switch
- 1, two-stage vacuum pump
- 1, digital vacuum gauge
- 1, MAC retrofit equipment kit, including
- 1, electronic leak detector
- 1, manifold gauge for CFC-12
- 1, manifold gauge for HFC-134a
- 1, hi-side adapter kit (including a GM 1991, etc.)
- 1, set of HFC-134a MAC service couplings
- 1, electronic weighing/charging scale
- 1. valve-core removers
- 2, sets of gloves and goggles
- Related spare parts for all of the above.

A further MAC R&R machine, portable multi-refrigerant analyser, DOT standard refillable 50-lb. CFC-12 refrigerant cylinder, two-stage vacuum pump, digital vacuum gauge and MAC retrofit equipment kit will be purchased to cover the training needs of the SJPP.

7. MONITORING MECHANISM

The monitoring of the Technical Assistance Project will be the overall responsibility of the NOU.

A national consultant, contracted under a specific RMP Monitoring Project incorporated within the RMP, will monitor the MAC service enterprises receiving MAC R&R machines and will provide a detailed statement of the amounts of CFC-12 recovered by each of them, on a quarterly basis, to NOU. The R&A/C service enterprises, garages or MAC service centres should also inform the national consultant each month as to the amount of R&A/C equipment or vehicles that have been retrofitted along with the identity of the owner and the registration numbers of the vehicles.

The possibility of including checks on class of refrigerant employed in MACs during roadworthiness certificate checks will also be examined.

Milestones for project monitoring

Task	Month*
(a) Project document submitted to beneficiary	1
(b) Project document signature	2
(c) R&A/C Retrofit Workshop	3
(c) Contracts awarded	4
(d) Equipment delivered	6
(e) MAC Retrofitting and R&R Workshops held	6
(f) MAC R&R Programme	6-29
(g) Submission of project completion report	30

^{*} as measured from Technical Assistance Project approval

Time frame

The time frame for implementation of this activity is given in the table below.

Activities	Year 1	Year 2	Year 3

Discussions with stakeholders	
R&A/C Retrofit Workshop	
Purchase and distribution of equipment	
MAC Retrofit and R&R Training Workshops	
Implementation of MAC R&R Programme	
Monitoring and reporting	

8. PROJECT COSTS

Nº	ITEM	US\$
21	MAC recovery/recycling/evacuation/charging machine incorporating an OFP device that will fill automatically in one single pass and a continuous process an internal or external cylinder. The unit will incorporate an oil separator, independent acid and moisture filters, automatic purging of non-condensable gases, an hour counter and appropriate refrigerant gauges and hoses. The	59,850
21	machine will be capable of being field converted to recycle HFC-134a, with a factory-supplied kit Portable multi-refrigerant analyser to identify recovered refrigerants as well as the proportional content of refrigerant mixtures and to assure that only CFC-12 is processed by the recycling machine	16,800
21	Two-stage vacuum pump	6,825
21	Digital vacuum gauge	3,150
21	MAC retrofit equipment kit	12,285
21	DOT standard refillable 50-lb. CFC-12 refrigerant cylinders with two ports and an OFP switch	2.100
	Related spare parts for the above	5,000
	SUB-TOTAL	106,010
	Contingencies 10%	10,601
	Packaging and Freight	8,000
	TOTAL	124,611

ACTIVITIES	US\$
International Expert to provide overall guidance and evaluation, conduct 3 Workshops and follow up on the reports and activities of the National Consultant (two missions to the country for conducting the 3 workshops, plus home base work)	25,000
National consultant to assist the NOU to select participants and distribute equipment and to assist the International Consultant during Training Workshops	1,000
3 Training Workshops, 1 for R&A/C retrofitting, 1 for training in retrofitting and correct working practices and 1 for recovery and recycling	18,000
Local travel within the country	1,000
Sundries (local telephone, fax, advertisements in papers, reporting)	3,000
Contingencies	0
TOTAL	48,000

Notes

- o The services of the consultants will be on a part time basis throughout the duration of the project
- o Contingencies are only being requested for equipment in this Technical Assistance Project

Incremental Capital Cost

US\$
124,611
48,000

TOTAL 172,611

9. COST EFFECTIVENESS

The cost effectiveness for this Technical Assistance Project is calculated for information only, as Barbados is a LVCC.

It is expected that the Technical Assistance Project will result in a lasting effect on consumption of 10.73 ODP tonnes (5.365 ODP tonnes/year).

Cost effectiveness for the Technical Assistance Project = US\$172,611.00 ÷ 6.33 ODP tonnes = US\$27.27/kg



Annual Work Plan

Barbados - Bridgetown

Report Date: 8/2/2005

Award Id: 00038816
Award Title: RMP: TAS FOR MAC AND END USERS

2005 Year:

Project ID Expected Outputs	Key Activities	Timeframe	Responsible Party			4	Planned Budget	
		Start End		Fund	Donor		Budget Descr	Amount US\$
00043256 RMP: TAS FOR MAC AND END USER	EQUIPMENT	8/2/05	BAR-Government of Barbado	63030	MPU	72200	72200 Equipment and Furniture	41,537.00
	INTERNATIONAL CONSUL	8/2/05	BAR-Government of Barbado	63030	MPU	71200	71200 International Consultants	19,000.00
	NATIONAL CONSULTAN	8/2/05	BAR-Government of Barbado	63030	MPU	71300	71300 Local Consultants	800.00
	SUNDRIES	8/2/05	BAR-Government of Barbado	63030	MPU	74500	74500 Miscellaneous Expenses	1,000.00
	TRAVEL	8/2/05	BAR-Government of Barbado	63030	MPU	71600	71600 Travel	700.00
	WORKSHOPS (TRAIN	8/2/05	BAR-Government of Barbado	63030	MPU	74500	74500 Miscellaneous Expenses	6,000.00
TOTAL								69,037.00
GRAND TOTAL								69,037.00

Annual Work Plan

Barbados - Bridgetown

Report Date: 8/2/2005

Award Title: RMP: TAS FOR MAC AND END USERS

2006

Year:

00038816

Award Id:

Project ID Expected Outputs	Key Activities	Timeframe	je	Responsible Party			_	Planned Budget	
		Start	End		Fund	Donor		Budget Descr	Amount US\$
00043256 RMP: TAS FOR MAC AND END USER	EQUIPMENT	8/2/05		BAR-Government of Barbado	63030	MPU	72200	72200 Equipment and Furniture	41,537.00
	INTERNATIONAL CONSUL	8/2/05		BAR-Government of Barbado	63030	MPU	71200	71200 International Consultants	3,000.00
	NATIONAL CONSULTAN	8/2/05		BAR-Government of Barbado	63030	MPU	71300	71300 Local Consultants	100.00
	SUNDRIES	8/2/05		BAR-Government of Barbado	63030	MPU	74500	74500 Miscellaneous Expenses	1,000.00
	TRAVEL	8/2/05		BAR-Government of Barbado	63030	MPU	71600	71600 Travel	200.00
	WORKSHOPS (TRAIN	8/2/05		BAR-Government of Barbado	63030	MPU	74500	74500 Miscellaneous Expenses	6,000.00
TOTAL									51,837.00
GRAND TOTAL									51,837.00





Annual Work Plan

Barbados - Bridgetown

Report Date: 8/2/2005

Award Id: 00038816
Award Title: RMP: TAS FOR MAC AND END USERS

Year:

2007

Project ID Expected Outputs	Key Activities	Timeframe	Responsible Party			ď	Planned Budget	
		Start End		Fund	Donor		Budget Descr	Amount US\$
00043256 RMP: TAS FOR MAC AND END USER	EQUIPMENT	8/2/05	BAR-Government of Barbado	63030	MPU	72200	72200 Equipment and Furniture	41,537.00
	INTERNATIONAL CONSUL	8/2/05	BAR-Government of Barbado	08089	NPU	71200	71200 International Consultants	3,000.00
	NATIONAL CONSULTAN	8/2/05	BAR-Government of Barbado	63030	MPU	71300	71300 Local Consultants	100.00
	SUNDRIES	8/2/05	BAR-Government of Barbado	63030	MPU	74500	74500 Miscellaneous Expenses	1,000.00
	TRAVEL	8/2/05	BAR-Government of Barbado	63030	NPU	71600 Travel	Travel	100.00
	WORKSHOPS (TRAIN	8/2/05	BAR-Government of Barbado	63030	MPU	74500	74500 Miscellaneous Expenses	6,000.00
TOTAL								51,737.00
GRAND TOTAL								51,737.00