

Foreword

This environmental report covers the environmental issues of the Government Flying Service (GFS) in 2003. In this report, we will focus on the key ways we work to help improve the environment and the direct environmental impact of our day-to-day departmental activities.

This report is primarily intended for Hong Kong citizens, our various business partners, other government departments, our own staff and other stakeholders. We understand that a single environmental report will probably not be capable of fully satisfying the information needs and interests of such a diverse group. If you feel there are specific areas that the report should include, please let us know and we will try to take into account your views in our future reports.

1. What we do

The Government Flying Service (GFS) operates a fleet of nine aircraft, namely seven helicopters and two aeroplanes, carrying out a variety of emergency flying services for the community of Hong Kong and those who earn their living in the South China Sea.

We are located at the south-western edge of the Hong Kong International Airport. As a government department, the GFS is supported and equipped by public funds and our aircraft are government property. We have an establishment of 238 full-time civil servants responsible for operations, administration and maintenance.

The GFS is a disciplined service department. We provide the community of Hong Kong with a broad range of flying services, including round-the-clock search and rescue coverage and casualty and medical evacuation; fire fighting and support to the work of various law enforcement agencies and government departments.

In 2003, the GFS flew a total of 6,956 hours. It assisted in 377 search and rescue operations, transported 2,003 patients to hospital by helicopter and flew approximately 10,462 government officers and official visitors. The actual recurrent expenditure of the GFS in 2003/04 was \$140 million.

The whole GFS is ISO 9001:2000 certificated. All the flying, engineering and administrative activities, including environmental management activities, are monitored by both internal and external quality and audit control organizations.

2. Our specific job

Our major tasks are to:

- Carry out search and rescue both over land and sea.
- Conduct casualty evacuation.
- Support the Hong Kong Police Force and other law enforcement agencies of Hong Kong in carrying out their law enforcement duties.
- Assist in fire fighting and in responding to any other emergencies which constitute a threat to life or property.
- Carry out photography for aerial surveys.
- Assist the medical services.

3. Vision and Strategy on Green Management

The GFS will continue its efforts to minimize the impact of its activities on the environment and provide the community with excellent search, rescue and aviation support services in an environmental friendly manner.

4. Environmental, Health & Safety Policy

The GFS is committed to conducting operations in compliance with all environmental, health and safety requirements and regulations. The management is entrusted to providing a safe workplace for all our employees and customers.

The managers and supervisors in the GFS have the responsibility to ensure that every employee fully understands the policies and procedures applicable to his/her work area. The responsibility for safety and environmental practices follow the chain of command and supervisors will be held accountable for a subordinate's actions. The supervisors should provide all necessary training and instructions for their staff to perform their duties in an environmentally sound and safe manner. Supervisors will have their own safety and environmental performance included in their performance reviews.

Each employee has the responsibility to comply with the GFS work rules, and follow safe work practices and procedures established to protect the environment and the employees. All employees are asked to report to their supervisor all unsafe acts, hazardous conditions, and conditions which impact, or have the potential to impact the environment.

The Government Flying Service Environmental, Health and Safety Committee will oversee the Government Flying Service Environmental, Health and Safety policy and goals. It is also responsible for addressing certain topics, including but not limited to waste reduction, accident prevention and training programs.

The Controller, GFS is personally committed to the continual improvement of our Environmental, Health and Safety performance and will authorise actions necessary to achieve these objectives.

5. Green Manager

Senior Pilot (Aeroplane Training and Standards) has been appointed as the Green Manager of the GFS with the following responsibilities:

1. implementing a programme of green housekeeping within the department;
2. introducing measures to increase staff awareness and involvement in relation to environmental issues; and
3. publicizing the commitment to protect the environment, formulating action plans and recording achievements.

He is the focal point whereby all initiatives related to the environment can be coordinated, sustained, reviewed and strengthened. He is assisted by the Assistant Departmental Secretary in carrying out such duties.

6. Our Environmental Concerns and Initiatives

6.1 Aircraft Noise

Helicopters

GFS pilots are very much concerned with the noise problems that are generated by helicopters. To this end, we have taken various measures to reduce the noise nuisance caused to the public, such as avoiding flying over built-up areas whenever possible. However, due to the nature of our flying services, such as casualty evacuation and support of law and order, it is not always possible to eliminate flights where the noise may affect the public.

In addition to the existing noise abatement procedures in various locations in Hong Kong, we have imposed certain restrictions on helicopter operations in the vicinity of Silvermine Bay and Tai O starting from 2001. All pilots are required to follow the designated routes strictly and avoid flying directly over inhabited areas. A standard route to and from Silvermine Pass and the GFS headquarters has been designed to avoid the noise sensitive areas in Tung Chung.

With the replacement of the helicopter fleet, we are able to perform flying service in a more environmental-friendly way because the noise generated by the new helicopters is lower than that of the old one. It is also lower than the standard set by the International Civil Aviation Organization (ICAO). Comparison tables on noise level

generated by our helicopters against ICAO's standards are given below:

Super Puma Helicopter

	ICAO Standard	Super Puma Helicopter
During Approach	100.7 db	96.1 db
During Take-off	99.7 db	94.6 db
During Flyover	98.7 db	93.5 db

EC155 Helicopter

	ICAO Standard	EC155 Helicopter
During Approach	97.9 db	95.7 db
During Take-off	96.9 db	92.2 db
During Flyover	95.9 db	88.9 db

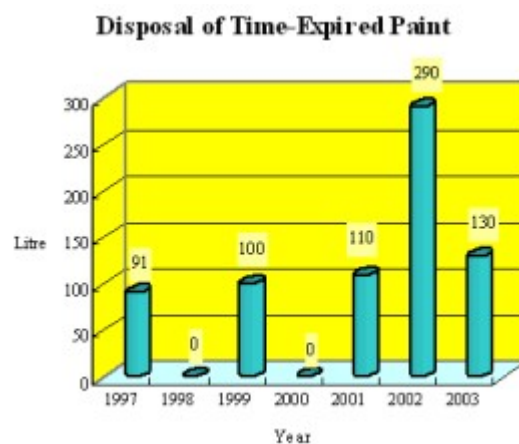
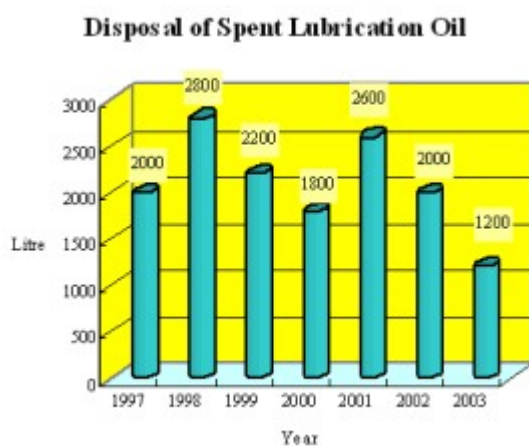
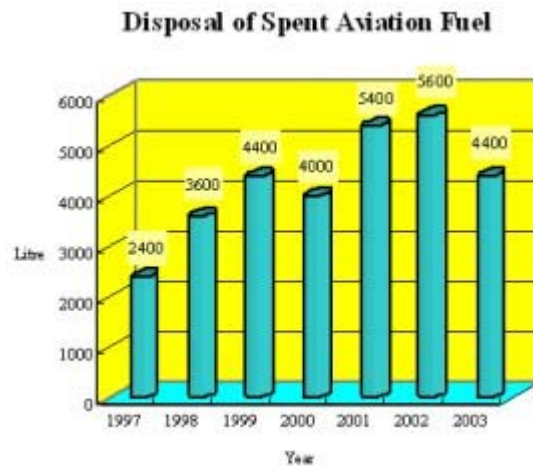
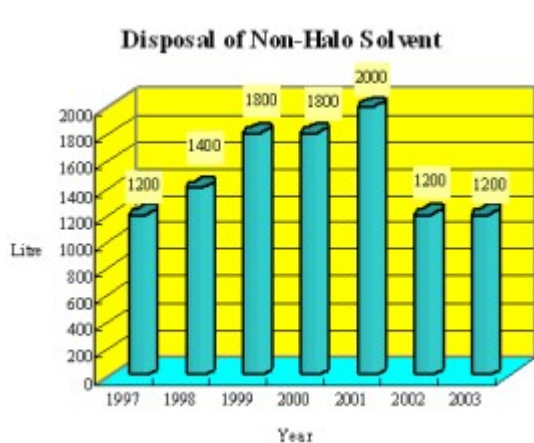
Aeroplanes

In 2003, we continued to take the following two measures in addressing the environmental issues:

1. The Aeronautical Information Publication issued by the Hong Kong Civil Aviation Department contains a requirement for aircraft departing from runway 07 at Chek Lap Kok to follow noise abatement departure procedures. GFS follows the procedures strictly to ensure that the necessary safety of flight operations is maintained whilst minimizing the noise on the ground.
2. We are very aware of the environmentally sensitive area around the Maipo Marshland. Since 2001, we have been tasked by the Agricultural, Fisheries and Conservation Department to take aerial photographs of the area to assist in a bird population census. We conducted the aerial photography flight with full regard to our own operating restrictions and flew the aircraft above 1000 feet in order to minimize noise disturbance to the birds and wildlife of the area.

6.2 Chemical Substances

The common chemical substances used in the GFS for the maintenance of our fleet are cleaning solvent, aviation fuel (AVTUR), lubrication oil, grease and paints. These substances are used on a daily basis. The waste chemical substances are disposed of through Licensed Waste Collectors approved by the Environmental Protection Department. The amount of wastes disposed of from 1997 to 2003 is as follows:



Note: The 290 litres of time-expired paint disposed in 2002 include about 150 litres of paint accumulated over 3 years but were disposed of in 2002. We did not dispose it earlier because the Environmental Protection Department required that chemical waste could not be disposed of without the relevant material safety data sheet and we were only able to obtain such data sheet for the 150 litres of paint in 2002.

6.3 Working with Other Government Departments in Environmental Protection

We work closely with other government departments in environmental protection. For example, our helicopters assist the Marine Department in the surveying of ships suspected of discharging oil in Hong Kong waters. We also help in spraying oil dispersant over the sea when required.

Besides, our aircraft take officers of the Environmental Protection Department to survey oil storage facilities and sewage. The fixed-wing aircraft are also used to take aerial photographs relating to land-fills, fish farms and the activities of industries which generate a large amount of waste.

6.4 Energy Use and Energy Savings Measures

The GFS set up the Green Task Force in February 2003 and has taken the following measures to save energy:

- (a) Switched off the lightings inside Lift No. 1 during day time;
- (b) Encouraged staff to switch off the light and air-conditioning when not required;
- (c) Raised the lower limit of all thermostats (252 nos.) to 20oC;
- (d) Raised the room temperature range of the following areas as follows:

Area	Temperature Range
Workshops	20°C to 22°C
Common areas	22 °C to 24 °C
Aircraft parts bonded store	24 °C to 26°C; and

- (e) Reduced the supply of hot water at water basins in summer by switching off part of the water heaters.

Through the above measures, we have managed to reduce the expenditure on electricity by \$276,397 (or 8.1%) for the months of February to December 2003 as compared to that in the same period in 2002.

The installation of carbon dioxide demand control system at the GFS Headquarters is in progress and will be completed in 2004. The system monitors the level of carbon dioxide at different areas of the building and maintains it at the optimum level and thus reduces the consumption of electricity by the air-conditioning and ventilation systems. It is estimated that the system can reduce the expenditure on electricity by \$161,000 per year.

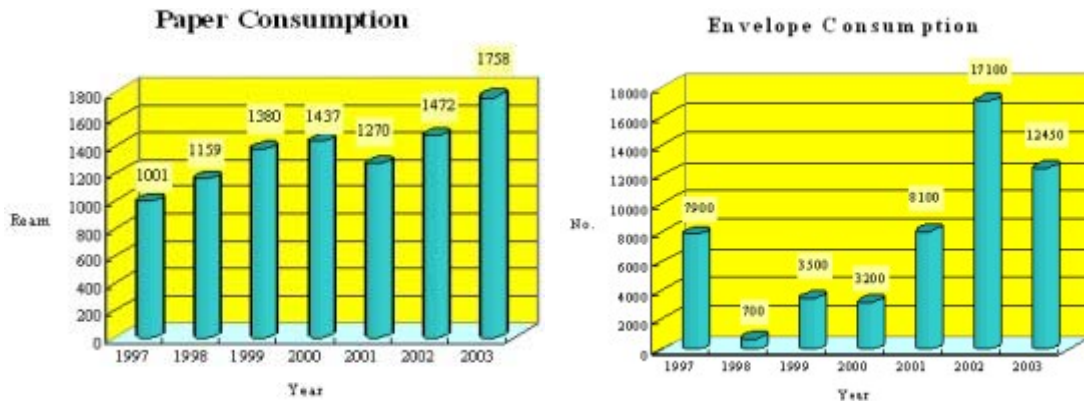
A study has also been conducted on the cost effectiveness of the installation of Luminosity Enhancement Jacket (LEJ) at the fluorescent lamps of the headquarters building. The principle of the LEJ is to provide the same level of luminosity with less fluorescent lamps. Although the LEJ helps reduce the consumption of electricity, it has to be used in conjunction with high lumen output fluorescent lamp. As these high lumen output fluorescent lamps are rather costly, it was decided not to pursue this project.

6.5 Office Resource Consumption

Paper and Envelope Consumption

Compared with that of 2002, the consumption of paper went up by 19% (or 286 reams) in 2003. This is mainly due to the need to print incoming correspondence received electronically for follow-up action when in the past such correspondence arrived in hard copies. The increase in need to reproduce the revised version of aircraft maintenance and operations manuals during the year also contributed to the higher consumption of paper.

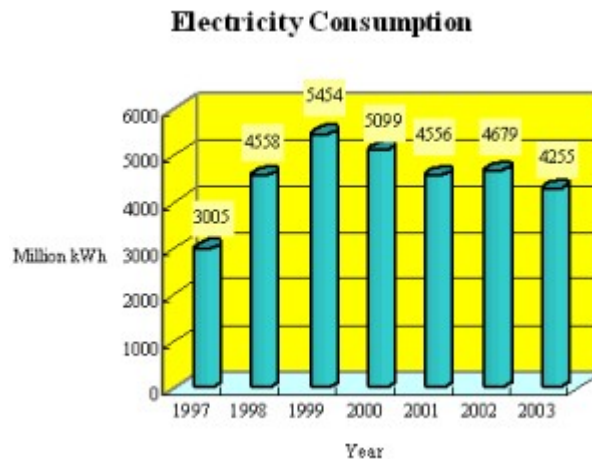
The consumption of envelope was reduced by 27% (or 4,650 nos.) mainly because there were less recruitment exercises conducted in 2003.



In 2003, we continued to encourage all staff to disseminate information by electronic means instead of sending hard copies.

Electricity Consumption

The consumption of electricity in 2003 was reduced by 9.1% as compared to that in 2002. This is the result of the concerted effort of all staff in energy saving.



6.6 Green Housekeeping Measures

The green housekeeping measures we have implemented in 2003 can be broadly grouped into the following categories:

- reducing paper and energy consumption;
- using environmental friendly stationery, office equipment and lighting equipment;
- collecting recyclable material;
- implementing the smoke-free workplace policy;
- conducting regular indoor air quality checks; and
- encouraging staff to contribute ideas on green practices.

During the year, we have participated in a number of environmental protection activities organized by the Environmental Protection Department and other

departments/organizations to promote the awareness of our staff in environmental protection. These activities include 'No-Smoking Day in the Workplace', 'World Environment Day 2003' and 'The Community Chest Green Day'.

In addition, we have participated in the 'Hong Kong Awards for Energy Efficiency and Conservation in Government' organized by EMSD to enhance staff awareness in energy conservation.

We are also developing an Integrated Application System which allows us to work towards a paperless office. We will put procedure manuals of the Engineering Section on the network thus reducing the consumption of paper in amending the manuals.

7. Aims for 2003

We will continue to encourage and remind our staff to practise and implement the various measures/programmes initiated in 2003 to help protect the environment. Our targets are:

- to reduce electricity consumption by 3%; and
- to report environmental performance of year 2004 by mid-2005.

For the longer term objective, we aim at setting up an Integrated Application System by end of 2005.

We will continue to monitor progress in the above areas.

8. Information and Suggestions

For further information required or any suggestions, please contact the Departmental Secretary as follows:

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