



# **Government Flying Service Environmental Report 2013**

## ***Foreword***

This environmental report covers the environmental issues of the Government Flying Service (GFS) in 2013. 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 residents, 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.

## *Content*

<b>1. What We Do .....</b>	<b>1</b>
<b>2. Our Specific Job.....</b>	<b>2</b>
<b>3. Vision and Strategy on Green Management .....</b>	<b>3</b>
<b>4. Environmental, Health &amp; Safety Policy .....</b>	<b>4</b>
<b>5. Green Personnel.....</b>	<b>5</b>
<b>6. Our Environmental Concerns and Initiatives.....</b>	<b>6</b>
6.1 AIRCRAFT NOISE.....	6
6.2 CHEMICAL SUBSTANCES .....	7
6.3 WORKING WITH OTHER GOVERNMENT DEPARTMENTS IN ENVIRONMENTAL PROTECTION .....	9
6.4 ENERGY USE AND ENERGY SAVING MEASURES .....	10
6.5 PAPER CONSUMPTION .....	12
6.6 OTHER GREEN HOUSEKEEPING MEASURES .....	14
<b>7. Aims for 2014 .....</b>	<b>16</b>
<b>8. Information and Suggestions.....</b>	<b>17</b>

## ***1. What We Do***

The Government Flying Service (GFS) is a disciplined services department of the Government of the Hong Kong Special Administrative Region and is located at the south-western corner of the Hong Kong International Airport.

We provide the Hong Kong community with a wide range of flying services, including round-the-clock search and rescue coverage, casualty and medical evacuation, fire fighting and support to the law enforcement agencies and government departments. We also provide emergency services to the international air carriers within the Hong Kong Flight Information Region and international merchant ships using the shipping lanes within the Hong Kong Maritime Area of Responsibility.

The GFS has an establishment of 227 full-time civil servants as at 31 December 2013 responsible for operations, maintenance and administration. We operate a fleet of eleven aircraft, namely four fixed-wing aeroplanes and seven helicopters to carry out the full range of flying services and support.

In 2013, the GFS flew a total of 6,272 hours. We assisted in 496 search and rescue operations, transported 2,040 people to hospital by helicopter and flew 9,172 government officers and official visitors. The recurrent expenditure of the GFS in 2013/14 is \$234 million.

## ***2. Our Specific Job***

The major tasks of the GFS are to:

- carry out search and rescue both over land and at sea;
- provide emergency air medical service;
- support the Hong Kong Police Force and other disciplined services in carrying out their law enforcement duties and training for such duties;
- assist in fighting fires and in responding to any other emergencies which threaten life or property;
- carry out photography for aerial surveys; and
- carry such persons as the Secretary for Security may authorize as passengers.

### ***3. Vision and Strategy on Green Management***

The GFS will sustain its efforts to minimize the impact of its activities on the environment and provide the community with safe, efficient and cost-effective emergency and general aviation support services in an environmentally 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 every employee fully understands the safety policies and procedures applicable to his/her work area. The responsibility for safety and environmental practices follows the chain of command and supervisors will be held accountable for 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 staff. 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 Controller, Government Flying Service is personally committed to the continual improvement of our environmental, health and safety performance and will authorise actions necessary to achieve these objectives.

The Government Flying Service Environmental, Health and Safety Committee, chaired by the Chief Aircraft Engineer, oversees the environmental, health and safety policy and goals of the department. It is also responsible for addressing certain topics, including but not limited to waste reduction, accident prevention and training programmes.

In 2013, the Committee continued to promote occupational safety and health as well as environmental protection.

## ***5. Green Personnel***

The Controller, Government Flying Service has appointed an officer as the Green Manager responsible for overseeing the environmental issues of the department. The Green Manager is assisted by the Green Task Force and Energy Wardens in implementing the GFS's Green Policy.

### **Green Manager**

Mr Danny Wong, Aircraft Engineer (Avionics) is the Green Manager of the GFS with the following responsibilities:

- (a) implementing a programme of green housekeeping within the department;
- (b) introducing measures to increase staff awareness and involvement in relation to environmental issues; and
- (c) publicising the commitment to protecting the environment, formulating action plans and recording achievements.

He provides a focal point for introducing, sustaining, reviewing and strengthening all environmental initiatives/activities. He is assisted by the Assistant Departmental Secretary in carrying out these duties.

### **Green Task Force**

The GFS set up the Green Task Force in February 2003 with the main focus on energy conservation. The Green Task Force comprises representatives from the Operations, Engineering, Supplies and Administration Sections. They are responsible for liaising with staff members to explore possible options for saving energy without affecting the GFS operations and also discussing with the Electrical and Mechanical Services Department (EMSD) on how to make the proposals and ideas into effective measures.



## ***6. Our Environmental Concerns and Initiatives***

### ***6.1 Aircraft Noise***

The GFS is very much concerned with the noise generated by our aircraft. Due to the nature of our flying services, such as casualty evacuation and support of law and order, it is not always possible to avoid flights where the noise may affect the public. Nevertheless, we have always been conscious of the need to conserve the environment and have taken various measures to protect the environment and minimize the noise nuisance caused to the public. Our measures include -

(a) Higher transit height through the harbour

Unless there is an operational requirement, our helicopters will fly at 1,000 feet or above in the harbour to reduce the noise caused to the public.

(b) Winding down of helicopter rotors

If a prolonged waiting time is expected, especially at a helipad in the urban area (e.g. Pamela Youde Nethersole Eastern Hospital rooftop), the helicopter rotors would be wound down to reduce the noise caused to the residents nearby. This can also help save fuel.

(c) Flight scheduling

Different tasks are combined into one flight as far as possible to reduce the total flight time and fuel consumption.

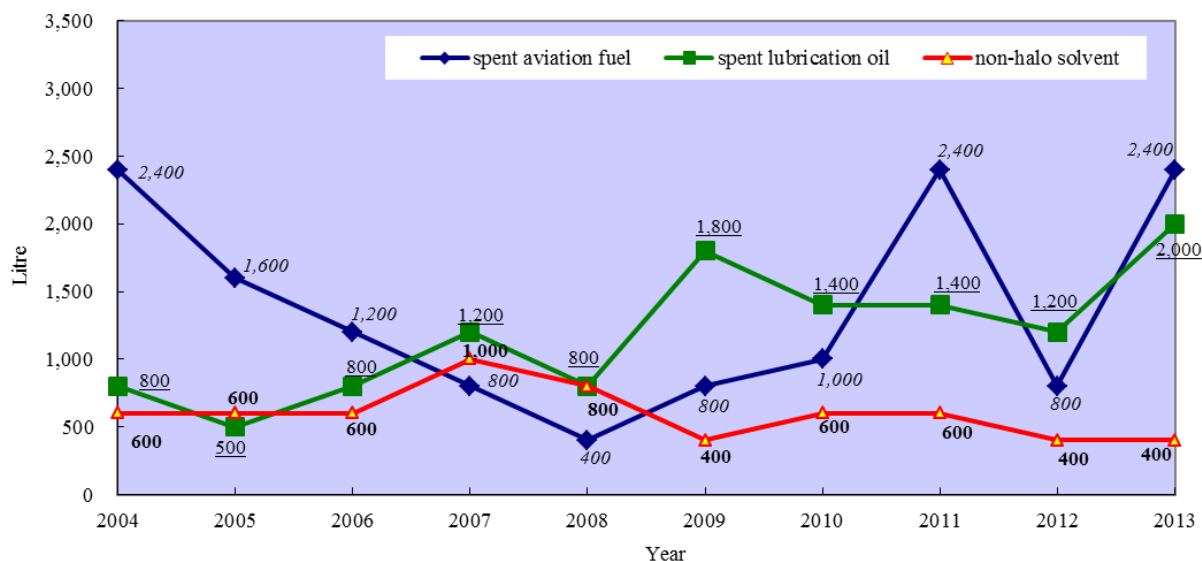
(d) Selection of Holding points

Specific holding points away from noise sensitive areas are identified for the heliport in case passengers are delayed.

## 6.2 Chemical Substances

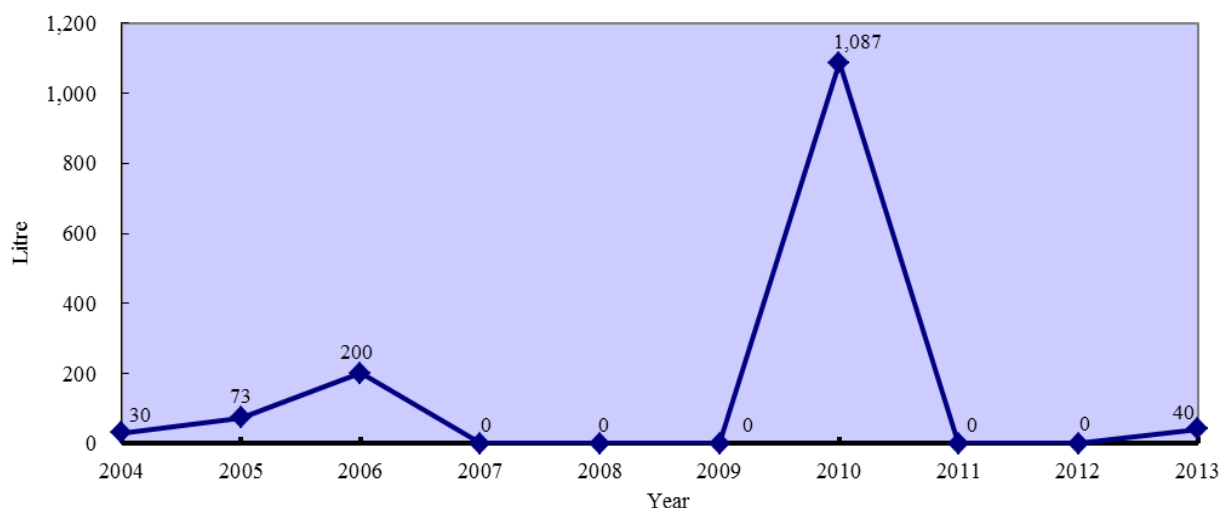
The common chemical substances used in the GFS for the maintenance of our fleet are cleaning solvent, aviation fuel, lubrication oil, grease and paint. These chemical substances are used on a daily basis. The waste substances are disposed of through licensed waste collectors approved by the Environmental Protection Department (EPD). The amount of spent oil and solvent disposed of in the past ten years is as follows –

**Disposal of spent oil and solvent**



For flight safety purpose, we conduct fuel sample checks for each storage tank and each aircraft daily. In the past, we disposed of these fuel samples. To reduce the amount of chemical wastes, we have filtered the fuel samples and re-used it for other purposes since 2005. This has resulted in a significant reduction in the disposal of spent aviation fuel. However, with a new aircraft, DA42NG, coming into operation in Dec 2012 and some aviation gasoline expired in 2013, there was an increase in the disposal of spent aviation fuel by 1,600 litres (200%) when compared with 2012. The multiple replacements of helicopter gearboxes and the maintenance activities for the new aircraft also led to the increase of spent lubrication oil by 800 litres (67%) whereas that of non-halo solvent remained the same as 2012.

### Disposal of time-expired paint



We have exerted continuous efforts for years to control the generation of time-expired paint at a low level. We have tried to use some of the aircraft paint waste for ground equipment maintenance with the aim of reducing the waste. As it is more cost effective for discarding the paint in one lot, following a disposal exercise for 1,087 litres of time-expired paint in 2010, we disposed of 40 litres of time-expired paint, which was accumulated in the past three years, in 2013. Disposal exercise will be initiated when waste paint has been accumulated to a certain amount.

We remind our staff regularly of the importance of the effective use of chemical and solvent in maintenance activities so as to further reduce the amount of chemical wastes.

### **6.3 Working with Other Government Departments in Environmental Protection**

The GFS works closely with other government departments in environmental protection. For example, our helicopters assist the Marine Department in conducting surveillance of floating refuse and oil pollution in Hong Kong waters. We also help in spraying oil dispersant over the sea when required.

Our helicopters also assist the Agriculture, Fisheries and Conservation Department in conducting a “Sky-shout” publicity exercise on hill fire prevention. On Sundays, public holidays and particularly Chung Yeung Festival and Ching Ming Festival, our helicopters help to disseminate the message of preventing hill fires to the public by flying above the countryside and playing pre-recorded voice messages through the loudhailers.

In addition, our aircraft carry officers of the EPD to take aerial photographs of power stations and their surrounding environment for studies and analyses. We also assist the EPD in conducting aerial inspections, surveys and monitoring of river catchments of Deep Bay and Mirs Bay on the spreading of wastewater plumes from major sewage outfalls. Our aircraft are also used to take aerial photographs for conducting site inspections and surveys of existing waste facilities such as landfills and transfer stations as well as planning of special waste projects in Hong Kong.

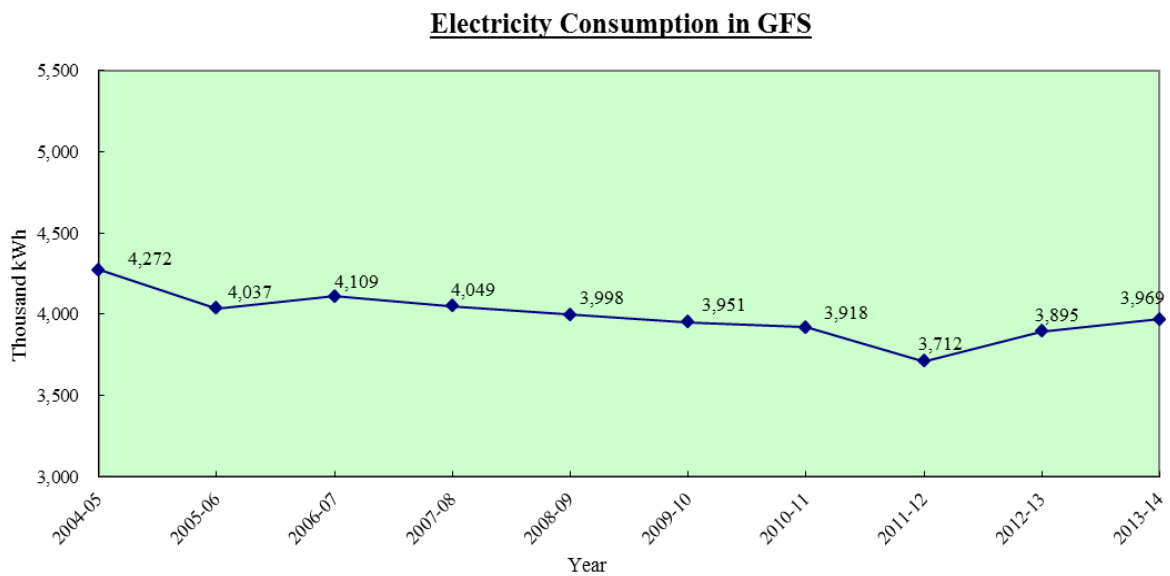


Helicopter in fire-fighting operations

## 6.4 Energy Use and Energy Saving Measures

The GFS is highly concerned about energy conservation and is constantly looking out for opportunities and the latest products that can bring about savings in energy or electricity consumption.

The table below shows the electricity consumption in the GFS for the past ten years. With the conduct of numerous building maintenance and renovation works and increase in aircraft maintenance activities in the GFS Headquarters, the electricity consumption slightly increased in 2013.



To achieve the target of reducing energy consumption, we are adopting the following green housekeeping measures -

- setting all photocopiers to energy saving mode when they are not in use for over 15 minutes;
- setting the room temperature at 25.5°C ;
- suspension of the passenger lift;
- installing venetian blinds/solar films at the windows which are exposed to direct sunlight;
- using occupancy sensors, zoned lighting and switches;
- using energy-efficient fluorescent tubes in office and LED light bulbs in hangar; and
- switching off lights, air-conditioning, computers and electrical equipment not in use.

The above measures are by no means exhaustive. We will continue to strive for energy saving.



Setting room temperature at 25.5°C



Venetian blinds at the Conference Room



Zoned lighting

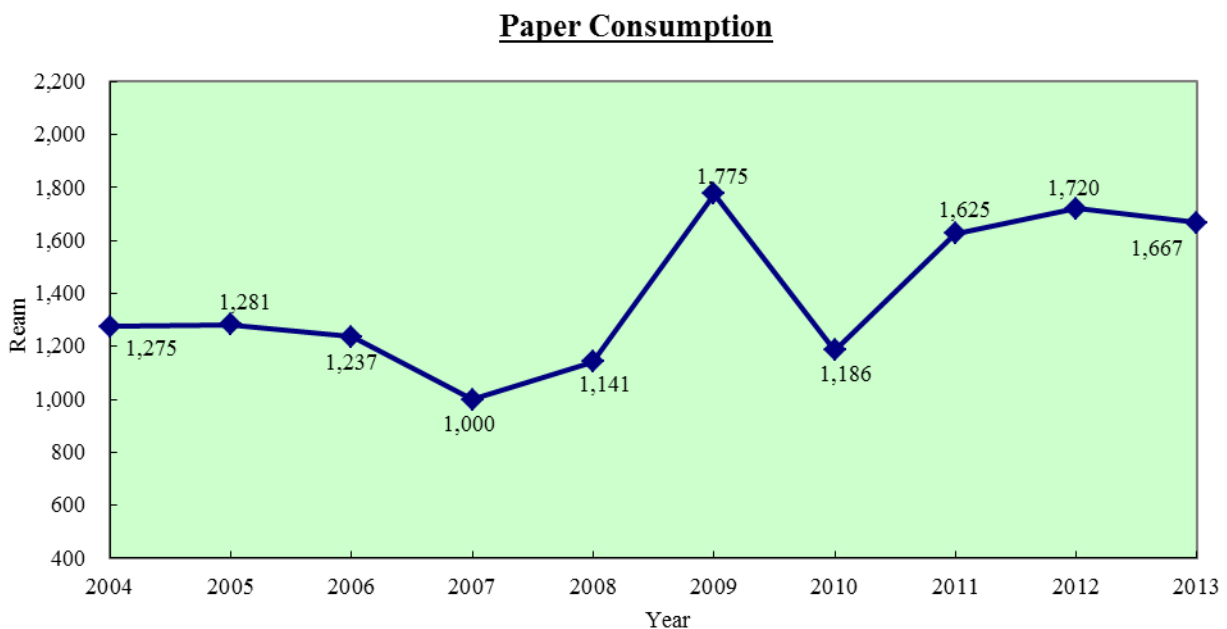


Occupancy sensors

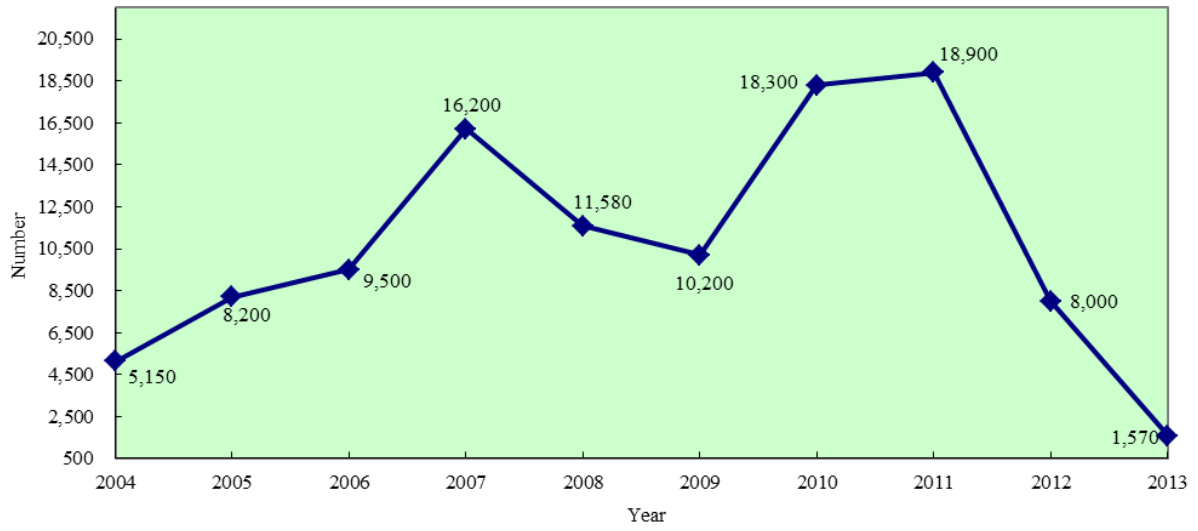
## 6.5 Paper Consumption

Compared with 2012, the consumption of paper and envelope reduced by 3% and 80% respectively in 2013. At the same time, about 5,056 kg of waste paper was collected for recycling in 2013, thus avoiding about 25 tonnes of Greenhouse Gas emission. We will continue to closely monitor the use of paper and envelopes and to minimize paper consumption by the following measures –

- using electronic communication;
- printing on both sides of paper;
- using the blank side of used paper for drafting or printing;
- minimizing photocopies by circulating circulars/documents by emails or using the old sets of documents for re-circulation, reviewing distribution lists;
- sharing reference materials on the local area network;
- re-using paper, envelopes and file jackets;
- using e-cards during festival seasons; and
- placing boxes next to photocopiers to collect used paper, outdated newspaper and publications for recycling.



### Envelope Consumption





## 6.6 *Other Green Housekeeping Measures*

The green housekeeping measures initiated/continued in 2013 can be broadly grouped into the following categories:

- using environmentally friendly lighting facilities (LED lights at the rear exits), electrical appliances, stationery, office equipment and sundries items (e.g. bio-degradable plastic rubbish bags and rechargeable batteries);
- using water purifiers to provide drinking water in the office in order to reduce the use of bottled water;
- using plumbing appurtenance (e.g. water taps, urinals and shower heads) with water saving devices;
- collecting recyclable materials (e.g. paper, aluminum cans, floppy diskettes, plastic bottles and toner cartridges);
- adopting green procurement (e.g. purchase of photocopiers and printers with double-sided copying/printing function; electrical appliances with energy saving functions and/or with greater energy efficiency);
- collecting food wastes;
- regular cleansing of the filters of the air ventilation system and carpet; and
- participating in environmental protection activities such as the Airport Community-wide Carbon Audit, Hong Kong International Airport Carbon Reduction Campaign, the Community Chest Green Day on 16-17 June 2013.



Recycle bins for aluminum cans and plastic bottles



Plumbing appurtenance with water saving devices



Water purifier



Photocopier with energy efficiency

## **7. Aims for 2014**

We will continue to encourage and remind our staff to practice and implement the various measures/programmes initiated/continued in 2013 to help protect the environment. Our targets in 2014 are:

- to review effectiveness of existing measures and to identify new initiatives to reduce resources consumption;
- to work closely with the EMSD in implementing more energy-saving measures to reduce electricity/energy consumption; and
- to continue to promote good housekeeping practices for energy saving and to educate our officers on the awareness and importance of environmental protection.

We will continue to monitor progress in the above areas and to foster a green culture in the department.

## ***8. Information and Suggestions***

For further information or any suggestions, you may contact the Departmental Secretary of the GFS through:

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