

# **ANNUAL REPORT 2007**





# **Our Crest**



The International Civil Defence triangle features prominently in the crest. The equilateral blue triangle symbolises the three main areas of Civil Defence - fire safety, first aid, and rescue and evacuation. Our state shield is set on the triangle, which is garlanded by a laurel of leaves, signifying the official status of the SCDF as a national organisation. The green laurel with a red ribbon, represents the honour of service in the Civil Defence. These are supported by a blue banner with the white inscription "Civil Defence Singapore". Blue, the colour of the SCDF – stands for loyalty and dedication to the nation and citizens.

# Our Mission, Our Vision

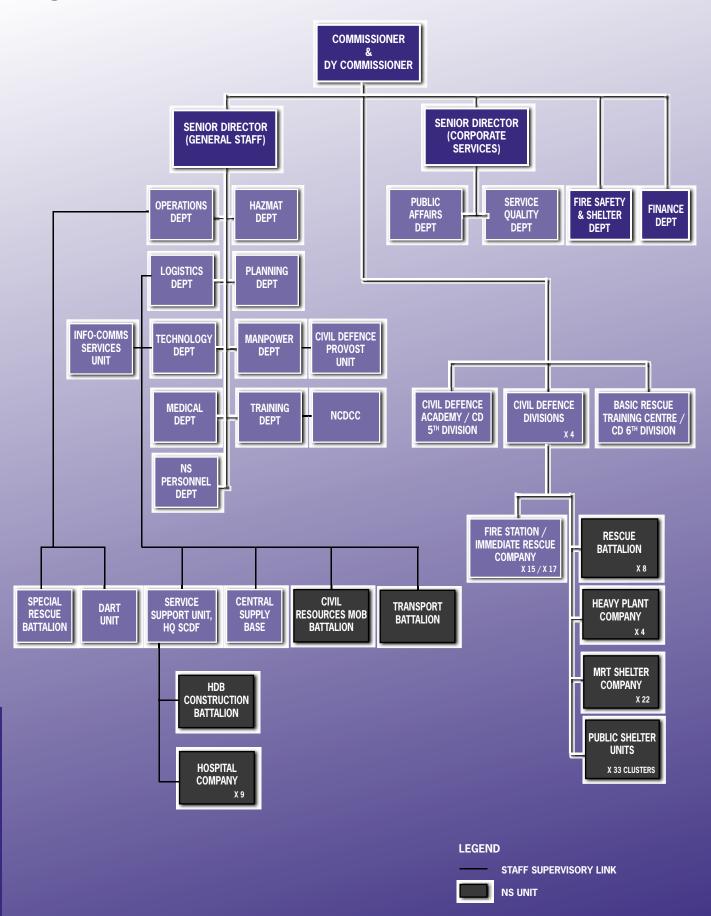


# **Our Core Values**



# About Us

### **Organisation Structure**



# SINGAPORE CIVIL DEFENCE FORCE ANNUAL REPORT 2007 • **C**

### Map of SCDF Establishments

### 4th CD Division 3rd CD Division 4A HQ 4th Division **3A** HQ 3<sup>rd</sup> Division Bukit Panjang Fire Post Yishun Fire Station 4C **Bukit Batok Fire Station** 3C Nee Soon Central Fire Post 4D Choa Chu Kang Fire Post 4E Bukit Timah Fire Post 3D Ang Mo Kio Fire Station 3E Teck Ghee Fire Post 4F Jurong East Fire Post 3F Braddell Heights Fire Post Jurong Fire Station 4G 3G Sengkang Fire Station 4H Jurong West Fire Post 41 Tuas Fire Station Punggol North Fire Post Tuas West Fire Post 4J 4K Sungei Kadut Fire Post Woodlands Fire Station 4L 4M Woodlands Fire Post Civil Defence Academy HQ SCDF Complex Basic 4H Rescue Training Centre 2<sup>nd</sup> CD Division **2A** HQ 2<sup>nd</sup> Division **Tampines Fire Station** 2C Tampines Fire Post 2D Pasir Ris Fire Post Loyang Fire Post Changi Fire Station Chai Chee Fire Post 2G 1<sup>st</sup> CD Division Marine Parade Fire Post 2H 1A HQ 1st Division Paya Lebar Fire Station Alexandra Fire Station 2J Geylang East Fire Post Telok Blangah Fire Post 1C Mountbatten Fire Post Bukit Merah View Fire Post 1D 1E Central Fire Station Cairnhill Fire Post 1F 1G Boon Keng Fire Post Toa Payoh Fire Post 1H 11 Bishan Fire Station 1J Clementi Fire Station 1K Clementi West Fire Post Jurong Island Fire Station



HQ SCDF / Civil Defence Academy / BRTC



# singapore civil defence force annual report 2007 • 🖊

# **Commissioner's Foreword**

The experiences of our neighbouring countries that had weathered the terror attacks on their soils have taught us that the real challenge posed to the authorities in the aftermath of the incidents was not so much the search and rescue efforts, but rather, how normalcy could be resumed within the shortest time possible.

Much as the SCDF, together with our Home Team colleagues, try to prevent such perverse acts of destruction from materialising, whether the terrorists manage to mount their attacks on Singapore ultimately is anybody's guess. Should a disaster strike, the criticality lies in whether the affected population is able to take care of themselves during the initial minutes of the attack before rescuers arrive. A population in disarray will impede the efforts of the authorities to bring the situation back to normalcy.

In the past year, we have hence embarked on a series of initiatives to beef up the community's emergency preparedness. But we must not stagnate in contentment. Instead, we will continue to conduct more civil emergency exercises tantamount to Exercise Northstar V, albeit with varied scenarios, to sensitise the community at large to the importance of emergency preparedness.

In addition, we will be working with the community leaders to enhance the message behind our community exercises. On top of the usual showcase of the capabilities of responding forces and educating what the community should do during a terror attack, greater emphasis will be placed on validating the propriety of the community's reaction during such incidents. In this regard, the exercises will be made more participatory and engaging to test their response.

Despite our efforts to achieve a self-reliant community capable of taking care of themselves, it does not mean that we can loose our foothold in our quest for operational excellence. The new workyear will see us leverage on our cutting-edge technologies and systems to augment our operational capabilities and pare down our manpower commitments. In this dynamic security climate, it will not suffice simply by working hard. More importantly, we need to work smart, and this entails constantly keeping ourselves abreast of technological advances and relentlessly seeking technological breakthroughs to enhance our operations.

An example of technology put to good use is the installation of the immobiliser device in all licensed HazMat transport vehicles from 1 Apr 2007. Upon detecting a violation by a suspicious vehicle, the SCDF is able to remotely slow the vehicle down progressively before it comes to a complete standstill, thereby preventing the vehicle from crashing into any of our key installations or places thronged with people. This also reduces the probability of our enforcement officers engaging in a cat-and-mouse chase while trying to accost the errant vehicle.

With the possibility of terror attacks in Singapore constantly plaguing us, it is of paramount importance that both the authorities and the community stay vigilant to stave off the realisation of such disasters as long as we can. The safety and security of our nation must never be taken for granted. Readiness is our only protection. Let us all take a vested interest in our homeland security and stand united to face any adversity that may come our way.

COMR JAMES TAN CHAN SENG COMMISSIONER

SINGAPORE CIVIL DEFENCE FORCE



# **Operational Excellence**





### **Incident Manager for S2006**

Singapore hosted the 2006 International Monetary Fund and World Bank Annual Board of Governors Meetings (known as S2006) from 11 to 20 Sep 2006. During this event, the SCDF was tasked as the Incident Manager for any consequence management. Running up to the S2006 event, the SCDF worked closely with other key response agencies including the Singapore Police Force, Ministry of Health (MOH) and the Singapore Armed Forces (SAF) in the development of comprehensive contingency plans and subsequent validation through table-top and ground deployment exercises. Seven deployment exercises, code-named "Exercise BOCA", were conducted from Jun to Sep 2006 at the relevant event locations, such as Esplanade and Singapore International Convention and Exhibition Centre at Suntec City.

A total of 959 personnel and 124 appliances from the SCDF, MOH and SAF were deployed for operational standby duties during the 10-day period of S2006. In addition, the SCDF assisted the Police as part of the Public Order Task Force.

### **Enhancing Surface Water and Rescue Capabilities**

Since 1997, the SCDF's Disaster Assistance and Rescue Team (DART) Unit has been trained and equipped to perform inland water rescue operations. To date, the Unit has performed

numerous water rescue operations in reservoirs, inland waterways and open storm drains. The plethora of water-based activities in many parts of Singapore's inland water bodies and the development of the Marina Basin has heightened the possibility of water-related contingencies.

In order to enhance its surface water and rescue capabilities to handle multiple water rescue and firefighting incidents simultaneously, the SCDF has purchased four amphibious vehicles for deployment at strategic locations. These vehicles will be managed by the fire stations and the vehicle crew will be trained to operate the vehicles and conduct basic water rescue and firefighting operations.

### **Equipping DART with Medical Capability**

During rescue operations, the DART specialists are often required to gain access to trapped victims in confined environments such as silos, interior of ships, collapsed buildings and tunnels. They are also called upon for complex height and depth rescue situations. Where it is dangerous for paramedics to attend to the trapped victims under such risky and hostile environment, it is critical that the DART specialists are proficient in medical knowledge and skills, as the trapped victims may require immediate medical attention while extrication operation is in progress.

In addition, the SCDF's experiences in its past Operation Lionheart deployments have shown that once the intensive search and rescue operations subside, the focus of the disaster relief efforts shifts towards medical operation for the survived victims.

To enhance the medical capability of the DART personnel, a specially designed three-week programme with focus in trauma management was conducted to equip them with the necessary life-support skills. All existing DART personnel have completed the training in Jul 2006.

### **Developing Fire Investigation Dog Capability**

The SCDF currently has an established Search Platoon with a fleet of dogs effective in assisting the rescuers during urban search and rescue operations. In light of this, the SCDF has taken a step further in 2006 by carrying out an in-house programme to develop and train dogs to assist in arson investigation. The use of locally-bred dogs for this purpose commenced with the acquisition of a five-month old Labrador from a local kennel. When fully trained, fire investigation dogs will lead to improved

accelerant sampling hit rate, more accuracy in determining the possible point(s) of fire origin, and long-term savings in evidence analysis cost and investigation man-hours. Further local acquisition and in-house training of dogs is currently being explored.

### **Enhancing Radiological 'Dirty Bomb' Response**

Since the implementation of the National 'Dirty Bomb' Response Build-up Plan in Feb 2004, the SCDF has completed several developments to enhance its 'Dirty Bomb' response capability. To date, all 15 fire stations island-wide are equipped with Radiation Detectors which allow the first responders to check for radiation contamination at scene. Frontline responders from the SCDF, Police Force, as well as other Related Agencies are also issued with personal radiation monitors, which will alert the responders once their radiation exposures reach unsafe levels. Besides being able to conduct rescue and evacuation operations for a 'Dirty Bomb' incident, the SCDF is also able to perform radiological decontamination for victims.



### **Enhancing Remote Situational Awareness**

It is critical that ground and tactical elements alike are able to have a realistic, up-to-date and accurate picture of incidents and operations conducted. During major standbys conducted in 2006, such as during S2006 and the National Day Parade, live video feeds were successfully tapped from multiple sources to enhance remote situational awareness and operational readiness. This arrangement to pipe images from the ground and other agencies to the SCDF command centres will be continued for future major standbys.

Real-time video-conferencing technology such as the Early Availability of Ground Information for Leader Evaluation (EAGLE) communications system was also deployed for Operation Lionheart missions in 2006. In addition, through collaboration with the MRT operators, video conferencing capabilities were established to ensure quick access to video images of incidents occurring in the train cabins and MRT stations.

### **Augmenting the Management of HazMat Incidents**

Following the operationalisation of the HazMat Decision Support System (HDSS) in 2005, the HazMat Incident Management System (HIMS) was developed in 2006 to provide the ground commander with an overall situational picture during HazMat incidents.

Using wireless technology, the HIMS streams simultaneous readings from multiple HazMat detectors on the ground to the command post for plume model generation. The generated HazMat zones can then be sent to responding ground forces to guide the ground commanders in their mitigation actions. Leveraging on a web-based information platform, this system also provides ready access to hazard advisories, archived building plans, storage level of hazardous materials, as well as their storage locations in Singapore. With the vast spectrum of critical information made available to the ground commander in an instant, the HIMS serves to improve the speed of decision-making when handling HazMat incidents.





### Implementation of the Live Inventory Portal

In order to enhance security control on hazardous materials, the SCDF has developed a Live Inventory Portal (LIP) which requires companies to regularly update their HazMat inventory via an online system.

The portal aims to provide the SCDF with an up-to-date picture of the type and amount of hazardous materials stored within the local industries. The LIP will support the HazMat Incident Management System to determine hazard zones during any HazMat emergency. The location of the hazard zones is critical in enabling ground commanders to make informed decisions quickly on the type of public protection measures to adopt to protect the surrounding facilities.

Together with five selected companies – Exxon Mobil, Shell, Singapore Refinery Company, LTH Logistics and Vopak Terminal, the SCDF successfully conducted an initial one-month trial from 8 Nov to 8 Dec 2006. To achieve a better representation of the industries concerned, a second trial involving the participation of 10 more companies from different industries was conducted until 31 Jan 2007.

With the implementation of the LIP in 2007, companies with portable storage of flammable materials or petroleum in quantities of more than one metric tonne will be required to update the portal on a weekly basis under normal threatcon.

About 400 warehouses, refineries and industrial premises are expected to participate in this scheme.

### **Increasing Coverage for Mass Casualty Situations**

Since the Station With Immediate First-Aid Treatment (SWIFT) was commissioned in 2004 to replace the conventional set-up of the modular tentages to treat casualties, especially during mass casualty situations, it has been deployed for training, exercises and operational standbys during high-level events.

In a Low Intensity Conflict situation involving simultaneous operations of multiple First-Aid Points, the SCDF has the capability to manage up to five major incidents, with the Civil Defence Academy (CDA) transforming into the 5<sup>th</sup> Division. Hence, four additional SWIFTs were acquired in May 2006, bringing the total fleet of SWIFTs to five. From 14 Aug 2006, the five SWIFTs were operationalised for 24-hour island-wide response from CDA. In addition, the Rescue Battalion Medical Platoon will take over command of the SWIFTs for immediate response whenever they report for In-Camp Trainings.

The deployment of two SWIFTs during the National Day Parade 2006 standby had greatly improved the medical coverage within National Stadium. During the S2006 standby in Sep 2006, two SWIFTs were also deployed for response to multiple event sites at the Singapore International Convention and Exhibition Centre, Raffles Hotel, Istana and Esplanade.

### **Improving Readiness and Proficiency of NS Units**

In 2006, the SCDF introduced a pre-ICT assessment to measure the readiness and proficiency of its active Rescue Battalions. This assessment covers the mobilisation, equipping and deployment of the Battalion and enables the SCDF to shape the subsequent ICT to address weaknesses observed during the assessment. Each Rescue Battalion has to undergo the pre-ICT assessment exercise on its alternate high-key years – second and fourth year of its ICT cycle. Battalions that perform well in the assessment will be exempted from their ICT scheduled for the year.

A trial assessment was successfully conducted on 41 RBn on 19 Aug 2006. The Battalion performed well during the assessment and was thus exempted from their scheduled ICT for the year. The pre-ICT assessment system was further refined after this initial trial and used on 31 RBn on 11 Nov 2006.

The new assessment system and the incentives for good performances have greatly boosted the morale of the Rescue Battalions to face the challenges posed during the exercise. The exemption from ICTs for achieving the prescribed standards in the assessment exercises had also resulted in cost savings of about \$244,000 for the two battalions in 2006.

### **Improving Resource Management during Crises**

To provide the Incident Manager with a more holistic picture of resources available in the homefront so as to facilitate planning and decision-making, the SCDF was tasked by the Ministry of Home Affairs to develop a system known as Personnel, Resources and Ideas Management System (PRISMS). This system is similar to the 'City-wide Asset & Logistics Management System (CALMS)' used by New York City to enhance resource management during a crisis. PRISMS aims to provide the Incident Manager with a comprehensive picture of Homefront resources available for operational support, ensure greater accuracy of real-time resourceavailability information, and serve as a planning tool for all Homefront Crisis Management Groups (CMGs). With PRISMS, the current gap of having to seek information from individual agencies during an emergency is bridged. This system, which has recently been renamed as Crisis Information Management System Plus (CIMS+), will also serve to bring the Ops Civil Emergency partners closer to one another.

### **New Fire Post to Address Operational Gaps**

In order to address operational gaps in the Bukit Timah district, the new Bukit Timah Fire Post was set up within the Bukit Timah Community Club and became operational on 9 Jan 2007. It replaced the Bukit Batok Fire Post, formerly located at Bukit Batok West Ave 6.









# **Community Preparedness**



### **Establishment of Civil Defence Auxiliary Unit**

To further engage the community in emergency preparedness and to give them a bigger stake in the overall protection of our nation against man-made disasters, the SCDF launched its Civil Defence Auxiliary Unit (CDAU) in Apr 2006.

Donning SCDF uniforms and possessing the same statutory powers of SCDF regulars, CDAU members perform frontline duties alongside regular officers. They contribute in the areas of firefighting and rescue, emergency medical service, public education, and other specialist subject matters pertaining to hazardous materials, fire safety and technology.

As at 31 Jan 2007, the 79-member CDAU comprises 28 personnel in the Fire & Rescue vocation; 33 in the Public Education vocation; 17 in the Emergency Medical Service; and one member in the Expertise Group.

# Community Exercises at Commercial & Industrial Premises

Since Jul 2005, community leaders such as the Civil Defence Executive Committees (CDECs) and Emergency Planning Groups (EPGs) have taken over the responsibility of organising community exercises, with the SCDF playing a supporting role in providing expertise advice and facilities.

To enable more CDECs and EPGs to have the opportunity in planning and conducting community exercises, and to increase the SCDF's outreach to the public, the SCDF has increased the number of these exercises, termed as Emergency Preparedness (EP) Days in 2006.

In addition to the 48 EP Days conducted in the heartlands, 24 EP Days were conducted at the commercial and industrial premises. Amongst these was an exercise conducted at Suntec City on 25 & 26 Apr 2006 in preparation for any emergency

that might arise during the IMF/ World Bank Conference in Sep 2006. The exercise sought to raise the emergency and In-Place Protection (IPP) awareness of the 5,000 tenants, building owners and residents living nearby.

Another exercise was carried out at the Singapore Science Centre on 25 May 2006, where more than 1,000 visitors viewed the various exhibits and participated in the hands-on stations to learn more about unconventional threats and emergency preparedness.

On 18 Aug 2006, the Nanyang Polytechnic EP Day also saw the launch of the Campus Emergency Response Team (CERT) comprising trained campus staff, the first of its kind in local polytechnics.

### **Community Bonding Day 2006**

In conjunction with the Homefront Security Month in September, the SCDF Community Bonding Day 2006 was

launched by Assoc Prof Ho Peng Kee, Senior Minister of State (Law & Home Affairs) at the HQ 3<sup>rd</sup> CD Division cum Yishun Fire Station on Saturday, 9 Sep 2006. For the first time, the event was jointly organised by the SCDF and the CDECs and was decentralised to each of the four Division HQs to make learning more convenient and accessible for everyone in the heartlands. Themed "Readiness is Our Only Protection", the Community Bonding Days provided an array of exciting activities to engage, enthral and educate both the young and old.

Highlights of the event included static display of emergency vehicles, joy rides on some of the vehicles, and operational displays. Opportunities were also abound for adventurous participants to take on the Firefighting, Breathing Apparatus or HazMat Challenges to experience the adrenaline-pumping task of saving 'casualties' or mitigating chemical spillage. Stage performances and fun fair organised by the CDECs further served to entertain the visitors.







# **Community Preparedness**

The Community Bonding Days provided a fun-filled platform where members of the public could better acquaint themselves with the SCDF's operational capabilities and pick up valuable emergency skills and knowledge. Nearly 13,000 members of the public attended the Community Bonding Days at the four locations over three Saturdays in September.

### **CEPP at the Divisions' Public Education Centres**

Each of the SCDF's four Division Headquarters is equipped with a Public Education Centre to train members of the public in life-saving skills and emergency procedures under the Community Emergency Preparedness Programme (CEPP). In addition to the daily evening lessons, the SCDF has since Apr 2006 made the Public Education Centres available for the public to participate in the CEPP during daytime. This is to allow more segments of the population to have the opportunity to attend the CEPP at their convenience.

Besides the interested individuals, the SCDF has seen a slew of organised groups participating in the CEPP at its Public Education Centres. As at 31 Dec 2006, the SCDF has trained 220,590 persons at its Public Education Centres. This is testimony of the Public Education Centres' success in reaching out to the population island-wide, with the public having easy access to the Public Education Centres. Amongst the organised groups trained include the Prisons Department, Singapore Armed Forces, Singapore Police Force, Philippines Embassy, Health Promotion Board and NTUC Fairprice.

### **Emergency Preparedness in Schools**

To inculcate the notion of emergency preparedness in students during their formative years, the SCDF has introduced several initiatives pertaining to the schools in 2006.













### Fire Safety Kit for Kindergartens & Pre-Schools

To sensitise children to the importance of fire safety, the SCDF has designed a fire safety kit to assist teachers in kindergartens and pre-schools island-wide to educate the children on basic fire safety. The kit comprises a fire safety animation video, picture story cards, poster, board games, and jigsaw puzzles with fire safety messages.

### **Fire Safety Puppet Show**

The SCDF and National Fire Prevention Council jointly organised the Fire Safety Puppet Show as part of a series of events to promote awareness in fire safety and preparedness amongst primary school students through interactive and engaging platforms.

The Puppet Show utilised art forms such as Puppeteering (Ventriloquism), songs and interactive theatre to educate the students on important fire safety messages and offer useful tips on fire prevention measures. The shows, which replaced the former Fire Safety Magic Show, were staged during school assembly sessions to reach out to as many students as possible. The shows were conducted in 30 primary schools in 2006.

### **CEPP for Secondary School Students**

To engage the population in emergency preparedness from young and to achieve the aim of having at least one member of each household in Singapore trained in civil defence skills, the SCDF has also offered the CEPP to all secondary schools since Apr 2006. This initiative, supported by the Schools Division in the Ministry of Education, has received encouraging participation from 137 secondary schools. As at 31 Dec 2006, more than 29,000 secondary school students have been trained in emergency preparedness knowledge and skills.

# **Emergency Preparedness Seminar for School Principals**

In order to keep the management of secondary schools informed of the SCDF's efforts in ensuring the safety and security of the nation, especially in light of the new security environment, the SCDF hosted the Emergency Preparedness Seminar at the Civil Defence Academy on 28 Jul 2006 for principals, Heads of Departments and Operations Managers from some 100 secondary schools. The seminar comprised a briefing segment, a static exhibition on conventional and unconventional threats, a display of the Civil Defence Academy's outdoor training facilities, as well as a hands-on session for participants.

# Community Preparedness

### **NCDCC** in Schools

The National Civil Defence Cadet Corps (NCDCC), established under the auspices of the SCDF and the Ministry of Education, was first introduced as a new uniformed group in 12 secondary schools in Jan 2005 to inculcate the importance of emergency preparedness in youths. Since then, the NCDCC has been growing in strength and has actively participated in numerous community exercises and events, such as the Emergency Preparedness Days and SCDF Community Bonding Days. As at 28 Feb 2007, 25 secondary schools have introduced NCDCC as a Co-Curriculum Activity for their students. The NCDCC currently has about 1,000 cadets.

### **Fire Safety Drive**

The SCDF collaborated with the National Fire Prevention Council (NFPC) to launch the inaugural Fire Safety Drive campaign to engage the community through a series of mini-campaigns, stringed together by the overarching theme of "Fire Destroys: Let's Prevent It!". The first of such campaign, conducted on 18 Oct 2006 at the Furama Riverfront Hotel, focused on Liquid Petroleum Gas (LPG) Fire Safety. Supported by the LPG Supply Companies such as Exxon Mobil Gas, Shell Gas, Union Energy and SPC/Wearnes Gas, brochures were printed and given to households with each delivery of LPG cylinder and distributed during SCDF and NFPC community events. A LPG Fire Safety Quiz was also carried out on the NFPC website from 18 Oct to 30 Nov 2006 to stress the importance of observing LPG fire safety at home.

### **Drive with a Heart**

To help inculcate a greater sense of responsibility in motorists to give way to emergency vehicles, the SCDF worked with the Traffic Police on an awareness programme in conjunction with the "Road Courtesy Campaign 2006". The campaign was launched on 17 Nov 2006 by Dr Teo Ho Pin, Mayor North West Community Development Council, MP for Bukit Panjang GRC and Chairman of Government Parliamentary Committee for Home Affairs and Law at the Singapore Expo Hall 3.

Besides encouraging general acts of courtesy from motorists, the three-month long campaign also stressed the need and importance of giving way to emergency vehicles proactively. Car decals bearing the tagline, "Drive with a Heart, Give Way to Emergency Vehicles" were distributed to members of the public through the SCDF's corporate and grassroots networks, selected petrol kiosks and Comfort taxis.

# Terrorism & Emergency Preparedness Advisories in Yellow Pages

The SCDF's Emergency Advisories have been published in the Community Pages of the Yellow Pages Buying Guide (English) 06/07 to provide the public with the knowledge to recognise unconventional threats and carry out appropriate self-help measures during emergencies. With the Yellow Pages delivered right to their doorsteps, households and businesses are able to get access to the four-page emergency preparedness









information readily and conveniently. Approximately 1.4 million homes and businesses have received the Yellow Pages Buying Guides.

# **Total Defence Day Exhibition at Singapore Discovery Centre**

As part of the continuous efforts to engage the community and schools in Total Defence, the SCDF, together with the Internal Security Department and Ministry of Information, Communications and the Arts (MICA), collaborated with the Singapore Discovery Centre to participate in the Total Defence Exhibition held at the Centre. The first of its kind, the exhibition was held from 2 to 22 Feb 2007 and bore "Combating Terrorism" as the theme.

The exhibition comprised a Public Education Display section where through various interactive games, displays of the SCDF's Personnel Decontamination Vehicle, Red Rhino and Fire Bike, and talks by SCDF officers, visitors got acquainted with the roles of the SCDF and the other crisis response agencies in Singapore. They also learnt how they could contribute towards ensuring the safety and security of the nation.

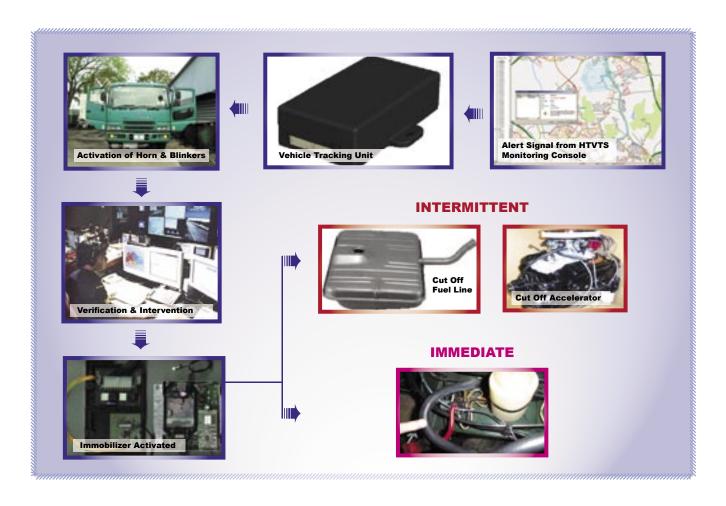
The exhibition attracted more than 10,000 visitors from organised groups from schools and uniformed organisations, as well as walk-in members of the public.







# **Effective Public Protection**



### Implementation of HazMat Transport Vehicle Immobiliser System

To prevent the possibility of terrorists exploiting vehicles transporting bulk flammable and other hazardous materials as weapons of mass destruction, the HazMat Transport Vehicle Tracking System (HTVTS) came into force on 1 Jul 2005, mandating all such licensed vehicles to be installed with tracking devices.

Under the HTVTS, the vehicle's horn and hazard warning lights will be activated in the event of any unauthorised removal or tampering of the tracking device, or a violation of the approved transportation routes or timings. This is to warn other road users to avoid the vehicle.

Keeping in mind that the vehicle on the move remains capable of causing destruction even after being detected, especially before the arrival of the SCDF mobile enforcement teams and Police, the SCDF has developed an immobiliser device that enables the SCDF Control Room to progressively slow down

the vehicle remotely to a speed of 10km/hr before it comes to a complete stop. For road safety considerations, the vehicle's horn and hazard warning lights will be activated before the immobiliser is triggered.

From 1 Apr 2007, all licensed local- and foreign-registered HazMat transport vehicles plying the roads of Singapore will be required to install the immobiliser device. Some 660 HazMat transport vehicles will be involved.

# Implementation of Fire Safety (Petroleum and Flammable Materials) Regulations

Following the passing of the amendment bill of the Fire Safety Act on 6 Feb 2004, the new Fire Safety (Petroleum and Flammable Materials) Regulations governing the import, transportation and storage of petroleum and flammable materials were gazetted on 16 Feb 2005 and implemented since 1 Jul 2005.

To ensure the smooth implementation of the new regulations in the affected industries, the SCDF conducted several sharing sessions with the affected parties, such as the chemical industry, and some adjustments were made to the licensing requirements and procedures.

In particular, exemption of plan submission and Fire Safety Certificate before applying for diesel storage licence has been given to construction work sites. Under the new procedure, construction sites are only required to submit the storage plan endorsed by Qualified Persons.

With regard to diesel storage, requirements for hydrostatic and radiographic tests for circular diesel tanks have been waived. The exemption quantity for diesel storage in commercial buildings for standby generators has also been raised from 200 litres to 1,500 litres if the storage tanks are firecompartmented and provided with bund walls. As a result, most office and commercial premises are exempted from diesel storage licence.

Following the implementation of the Fire Safety (Petroleum and Flammable Materials) Regulations, revisions were made to the Company Emergency Response Team (CERT) guidelines for storage of flammable materials in four broad types of infrastructures, namely, industries, institutes, warehouses and sensitive installations. The CERTs would be validated using an audit check system with planned audits and HazMat drills. In addition, the Emergency Response Plan (ERP) format was further customised for companies defined and categorised in the same four broad types of infrastructures.

# Inspection of Fire Safety Systems in Residential

Having completed the pilot programme on inspection of old residential buildings that are more than 20 years old in 2005, the SCDF extended the inspection scheme into its second phase in 2006 for 800 buildings that are between 10 to 20 years old. The SCDF has randomly conducted on-site audit checks on some of these buildings and found the level of fire safety compliance to be generally good.

### **Review of Technical Requirements for Household** and Storey Shelters

Several initiatives have been implemented in 2006 to facilitate the building developers' compliance with the Shelter Act and enhance flexibility in design and layout, as well as to make the Shelter Code more business-friendly without compromising protection level.

Since 1 Jun 2006, the Product Listing Scheme (PLS) for storey shelter doors has been implemented to enhance the standardisation and quality control in the manufacturing of storey shelter doors. Two door suppliers, Prefab and YTL, have also been registered under the PLS. The latest storey shelter guidelines, including the staircase storey shelter design guidelines, have been issued on 3 Aug 2006 taking into account feedback from professionals, designers and the building trends. Permissible variations for Household Shelter Technical Requirements have also been established and incorporated in the revised Household Shelter Code.









# **Organisational Excellence**







### **Assisting in International Humanitarian Efforts**

One day after a massive earthquake struck Central Java, Indonesia on 27 May 2006, the SCDF despatched its Operation Lionheart contingent to assist the Indonesian authorities in search and rescue operations. The earthquake, measuring 6.2 on the Richter Scale, purportedly claimed more than 6,200 lives and left 46,000 others injured.

Besides the Operation Lionheart contingent, a SCDF officer was also deployed as a member to the United Nations Disaster Assessment and Coordination (UNDAC) team to facilitate the coordination of incoming humanitarian relief items. In addition, two members of the Operation Lionheart contingent were subsequently activated under the Asia Pacific Humanitarian Partnership team to provide comprehensive communications system support to the UNDAC team at the UN Reception Centre.

Throughout the 10-day deployment, the 43-member SCDF contingent, together with an 11-member medical team that the SCDF despatched on 31 May, treated more than 520 casualties.

### **Providing Globalised Training Services**

With the SCDF being hailed by many as a world-renowned national emergency authority, the number of external organisations, both local and overseas, as well as overseas counterparts seeking the SCDF's assistance in providing specialist speakers and training courses has surged. The increase in the number of corporate visits hosted by the SCDF over the years also bears testimony of the fact that many are eager to learn the SCDF's recipe to success.

### **International Courses for Foreign Counterparts**

The SCDF continued to conduct a series of international courses for its overseas counterparts from the region and globally. The three staple international courses, namely International Urban Search And Rescue (IUSAR), HazMat and Fire Fighting courses were, as in previous years, very well subscribed. As at 1 Jan 2007, the Civil Defence Academy has hosted a total of 708 international participants of the various courses since it opened in 1999.

Apart from these courses, the SCDF has received requests from some countries to customise courses for their personnel. Examples of these customised courses include the International Fire Fighting Course for Qatar Civil Defence Department, International Urban Search And Rescue Courses for China Earthquake Administration and Malaysian Civil Defence Department, International HazMat Course for the Macau Public Security Police Force, and DART Course for Philippines Coast Guard.

### **Expert Persons at Local and Overseas Forums**

2006 also saw a surge in requests by external organisations for SCDF officers to speak and share their expertise and experiences at various local and overseas forums. In particular, LTC Eric Yap, Director of the Operations Department in HQ SCDF, shared his experience on planning and conducting "CBRE Exercises in a Civil Environment" at the 2<sup>nd</sup> Nuclear, Biological, and Chemical (NBC) International Conference in Italy in Oct 2006, while LTC Anwar Abdullah, Commander of the 2<sup>nd</sup> CD Division, spoke on the SCDF's "Disaster Preparedness and Surveillance" at an International Forum on Disaster Relief organised by Brunei Fire & Rescue Department in Brunei Darussalam in Jul 2006.

Recognising the SCDF's expertise in urban search and rescue, the United Nation's Office for the Coordination of Humanitarian Affairs (OCHA) sought assistance from the SCDF to support the International Search and Rescue Advisory Group (INSARAG) in assessing the ability of the Los Angeles County International Search and Rescue Team to meet the requirements for classification as a 'heavy' rescue team in accordance with the INSARAG guidelines. Two SCDF officers, COL Ang Tse Meng and MAJ Kadir Maideen served as assessors of the exercise conducted at Del Valle Regional Emergency Training Centre in Castaic California, U.S. in Jan 2007.

### **Corporate Visits to the SCDF**

In 2006, the SCDF hosted a total of 43 corporate visits from foreign guests, of which over 60% of these guests emanated from ASEAN, China, Korea, Japan and India. Apart from these countries, the SCDF has also hosted guests from Europe, Middle East and Australia.

The number of foreign visits hosted by the SCDF has increased steadily over the last five years, with an increased number of visitors from the ASEAN and Asian regions. These visits are instrumental in fostering closer relations between the SCDF and the emergency authorities worldwide and they facilitate greater understanding and camaraderie and exert a positive impact on international collaborations.



## Organisational Excellence



### **Fostering Better Understanding through Cross Attachments**

The SCDF actively engages its people in job attachments with its foreign counterparts and other external organisations to exchange best practices and foster better understanding for mutual benefit.

In 2006, 19 SCDF officers participated in attachment programmes with its counterparts in Australia and Hong Kong. Specifically, four paramedics were attached to the Metropolitan Ambulance Service in Australia for two weeks in Nov 2006. Another four paramedics and four Emergency Response Specialists were attached to the Hong Kong Fire Services Department for a similar duration in the same month. Besides this, the year also saw five foreign participants being attached to the SCDF for a duration ranging from a few days to a month.

On 23 Mar 2006, a Memorandum of Understanding (MOU) was signed between the SCDF and the Australian Institute of Police Management (AIPM) to establish a framework to facilitate the exchange of information and ideas for the mutual benefit of both parties. Under the MOU, LTC Yazid Abdullah, Director of Training Department in HQ SCDF was attached to the AIPM in Sydney for 3 weeks as the Visiting Fellow on the Australasian Fire Authority Council (AFAC) Executive Development Programme in Aug 2006. This was followed by

the attachment of the Operations Manager of the AIPM, Mr Geoff Conway to the SCDF in Oct 2006.

On 25 Oct 2006, the Qatar Civil Defence Department and the SCDF signed the Implementing Agreement, formalising the three-month attachment of four SCDF officers to Qatar Civil Defence Department (QCDD) in Nov 2006. The Implementing Agreement facilitated the provision of advice and assistance by these four officers to QCDD in the areas of fire ground operations and management of fire stations. This Implementing Agreement was made pursuant to the Memorandum of Understanding signed between the Ministry of Interior of Qatar and the Ministry of Home Affairs on 8 Oct 2006.

### **Hosting international conferences**

Sixty-five participants from nine countries attended the 4th Asian Crisis Management Conference at the Orchard Hotel in Singapore on 12 and 13 Oct 2006. Organised by the SCDF, the conference covered issues on Crisis Management, Emergency Plans, Disaster Reduction and Response, HazMat Control, Chemical, Biological, Radiological, Nuclear (CBRN) Threat and Counter-measures, etc. The conference facilitated mutual learning from the diverse expertise and experiences of the delegations, thereby further strengthening the networking between the participants.

# Winning the Dale Carnegie Leadership Award 2006

The SCDF has joined world-renowned organisations like Ford Motor Company, Coca-Cola, Adidas, The Boeing Company, Wal-Mart, Campbell Soup and The Four Seasons Hotel to be awarded the prestigious Dale Carnegie Leadership Award.

The Dale Carnegie Leadership Award was established by Dale Carnegie Training®, one of the world's leading human resource and management consulting organisations, in 1985. It is granted to a company that places special emphasis on the development of its human resources, innovation and organisational creativity for the purposes of achieving its business objectives and thus contributing significantly to the development of its country's economy and society.

The SCDF is the second local organisation to be given this award, after Dairy Farm Group. The Dale Carnegie Leadership Award 2006 was presented to the SCDF by Mr Peter Handal, Chairman & CEO of Dale Carnegie Training® at the Marina Mandarin Hotel on 1 Aug 2006.

Winning the Dale Carnegie Leadership Award 2006 is another proud entry in the SCDF's milestone chart. It is testimony of the SCDF's visionary and exemplary leadership and its sturdy commitment to innovation and human resource development.

### **Renewing the People Developer Standard**

The SCDF obtained the People Developer Standard (PDS) on 31 Mar 2003 for having put in place various comprehensive and people-oriented systems to develop its people to their fullest potential. In 2006, the PDS was successfully renewed for another three years.

### **Engaging in Economy Drive Initiatives**

As part of the Economy Drive, the SCDF has been proactive in realigning and improving functional areas to support changing demands in the dynamic operating environment while keeping its operating costs down. Initiatives implemented include purchasing standard-sized uniforms instead of tailor-made uniforms; replacing Personal Protective Equipment for training purpose with lower-cost equipment; and purchasing operational appliances without equipment as the use of existing equipment is extended.

The SCDF also chairs the forum for championing the Demand Aggregation (DA) initiatives of the Home Team Vehicle Fleet Group. The various DA initiatives explored include a common Comprehensive Maintenance Contract on vehicle maintenance; switching from Octane 98 fuel to Octane 95 fuel of a lower cost; tapping on DSTA courier service contracts to eliminate the use of despatch motorcycles; and leasing of vehicles instead of buying them.





### Organisational Excellence

In addition, to improve the efficiency of logistics practices within the SCDF, performance-based services pertaining to cleaning contracts, mechanical and electrical maintenance works, and horticulture services were adopted at all the SCDF establishments. This cost-effective approach has allowed the SCDF to obtain better control over the service standards and contract performance.

### **Bringing All NSmen under a Common Portal**

Many months of collaborations between the Ministry of Defence and the Ministry of Home Affairs saw the unification of previously independent NS websites of the Singapore Armed Forces (SAF), the Singapore Police Force (SPF) and the SCDF under a common website.

Launched on 6 Nov 2006, the new NS Portal aims to create a common identity and foster interaction, knowledge-sharing and a stronger alliance amongst the NS communities of the three forces

All electronic services which were previously available on the separate SAF, SCDF and SPF websites, such as Overseas Notification, Exit Permit, eSelf-Update, eNS Booklet and eClaims are now available on the new NS Portal. In addition, NSmen can now access a wider range of lifestyle services such as career and financial advice, health tips, travel write-ups and restaurant reviews on the portal. They also enjoy commercial offerings such as merchant discounts and vouchers.

### **Providing Second Career Options to Retired Staff**

The Cooperative for SCDF Employees (COSEM) was established in Jun 2005 to extend welfare and benefits to SCDF staff. The SCDF hopes to provide fire and life safety products and services to the general public and businesses at an affordable cost through COSEM. In addition, COSEM offers an avenue where jobs can be provided to its retired staff, whose expertise and experience with the SCDF could be further tapped to contribute to its business ventures.

As at 31 Jan 2007, COSEM has through its business endeavours secured employment for 19 SCDF retirees as security officers at HomeTeamNS, Community Emergency Preparedness Programme Instructors, Orientation Driving Officers and Terrain Decon Officer. In addition, options were explored with NTUC Job Re-creation Department, Work Development Agency and the Immigration and Checkpoints Authority for the provision of post-retirement employment in other areas of work unrelated to the SCDF.



# The Year in Statistics

### Fire Incident Statistics (JAN - DEC 2006)

### **Total Fire Calls**

The SCDF responded to 4,702 fire calls in 2006. This is 337 cases (or 7%) less than the number of incidents in 2005 when there were 5,039 cases. It is also the lowest number of incidents recorded in the last 20 years, except for 2003 which registered 4,540 cases.

The overall downward slide in fire figures over the years (see Graph 1) can be attributed to the concerted efforts put in by the SCDF and its active community partners and supporters. This includes the National Fire Prevention Council (NFPC), Civil Defence Executive Committees (CDEC), grassroots leaders and the community at large. Island-wide programmes such as Community Emergency Preparedness Programmes (CEPP), Emergency Preparedness (EP) Days, Outreach Programmes in schools, commercial industrial sectors have been useful in forging a more fire safetyconscious community.

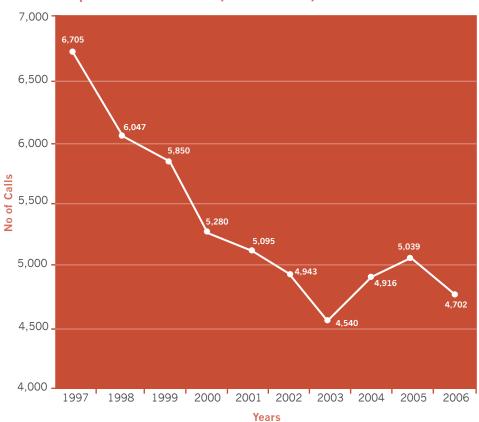
### **Genuine Fire Calls**

Of the 4,702 fires last year, 2,957 involved residential premises, constituting a drop of about 3% (i.e. 99 cases) compared to the previous year. *See Table 1*. This is the lowest since 1993, which recorded 2,419 such fires that year.

The number of fires involving non-residential premises (i.e. commercial, industrial and social/communal premises) last year fell by 25 cases to 610. This is also one of the lowest in the past decade. Such fires began to drop after hitting a high of 820 cases in 1999.

Fires affecting non-buildings such as those involving bushes, rubbish and vehicles fell from 1,348 cases in 2005 to 1,135 last year.

Graph 1: Total Fire Calls (1997 to 2006)



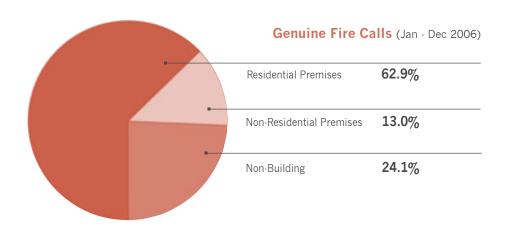


Table 1: Breakdown of Genuine Fire Calls

DESCRIPTION	Jan-Dec 2005	Jan-Dec 2006	Absolute Change
Residential Premises	3,056	2,957	-99
Non-Residential Premises	635	610	-25
Non-Building	1,348	1,135	-213
TOTAL	5,039	4,702	-337

### Fire Incident Statistics (JAN - DEC 2006)

# Fires In Non-residential Premises

Of the 610 fires involving non-residential premises, 311 cases involved commercial premises including shops in complexes and residential heartland estates. Industrial buildings including factories and warehouses fell to 152 cases from 159 in 2005. Fires involving social/communal premises such as schools, rubbish collection centres and sports complex also declined, from 162 cases in 2005 to 147 last year. See Table 2.

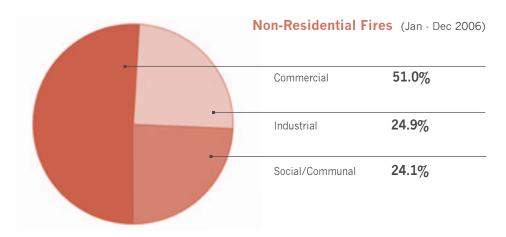


Table 2: Breakdown of Fire Calls (Non-Residential Premises)

DESCRIPTION	Jan-Dec 2005	Jan-Dec 2006	Absolute Change
Commercial	314	311	-3
Industrial	159	152	-7
Social/Communal	162	147	-15
TOTAL	635	610	-25

# Fires In Residential Premises

Types of fire outbreaks in residential premises are captured in *Table 3*. A large bulk of these fires involved rubbish in bin chutes, discarded items in common areas (such as void decks) and rubbish bins in lift lobbies.

Fires resulting from unattended cooking lowered by 40 instances last year to 509.

Fewer fires involving contents of houses such as furniture, clothing and mattresses broke out last year. This is a drop of about 3% (or 10 cases) from 358 in 2005 to 348 last year. Electrical fires also fell, from 181 cases in 2005 to 177 last year.

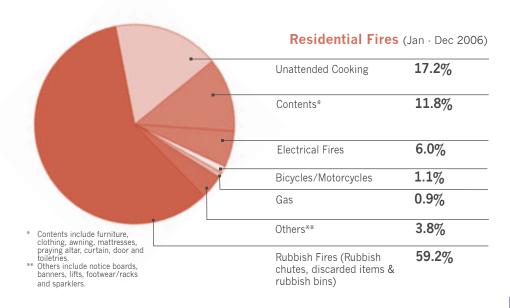


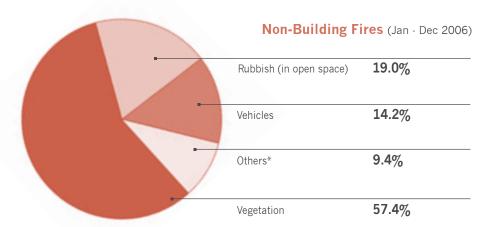
Table 3: Breakdown of Fires in Residential Premises

DESCRIPTION	Jan-Dec 2005	Jan-Dec 2006	Absolute Change
Rubbish Fires (Rubbish chutes, discarded items & rubbish bins)	1,777	1,751	-26
Unattended Cooking	549	509	-40
Contents*	358	348	-10
Electrical Fire	181	177	-4
Bicycles/Motorcycles	44	33	·11
Gas	26	26	0
Others**	121	113	-8
TOTAL	3,056	2,957	-99

# Fire Incident Statistics (JAN – DEC 2006)

### Fires Involving Nonbuildings

Non-building fires (e.g. vegetation, vehicle) fell to 1,135 cases last year from 1,348 in 2005. As shown in *Table 4*, all fire types under this category dropped last year.



\*Others include bus stops, standalone ATM kiosks, praying altar, incense, tentage and canvas.

Table 4: Breakdown of Fires Involving Non-Buildings

DESCRIPTION	Jan-Dec 2005	Jan-Dec 2006	Absolute Change
Vegetation	800	651	-149
Rubbish (in open space)	241	216	-25
Vehicles	168	161	-7
Vessels	4	0	-4
Others*	135	107	-28
TOTAL	1,348	1,135	-213

### **Causes Of Fires**

The main causes of fires last year are listed in *Table 5*. 'Light thrown down' led to 2,873 cases. This is a significant drop of 217 cases. Despite this drop, this cause continues to contribute to the bulk of fires in Singapore.

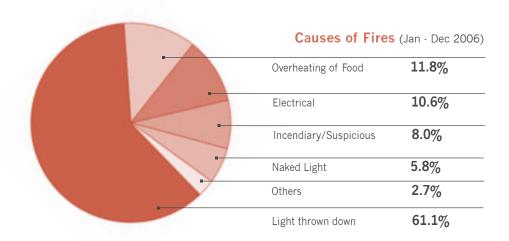


Table 5: Causes of Fires

DESCRIPTION	Jan-Dec 2005	Jan-Dec 2006	Absolute Change
Light thrown down	3,090	2,873	-217
Overheating of Food	601	555	-46
Electrical	498	497	-1
Incendiary/Suspicious	376	374	-2
Naked Light	277	277	0
Others	197	126	-71
TOTAL	5,039	4,702	-337

#### Fire Incident Statistics (JAN – DEC 2006)

#### **Fire Casualties**

The number of casualties from fire incidents last year fell from 112 in 2005 to 94 last year, comprising 91 injured persons and 3 fatalities. See Table 6.

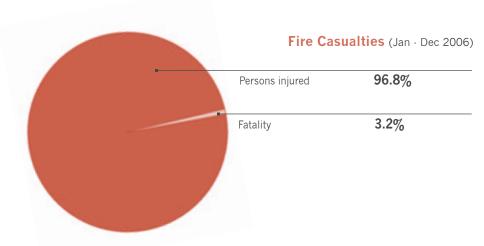


Table 6: Breakdown of Fire Casualties

DESCRIPTION	Jan-Dec 2005	Jan-Dec 2006
Persons injured	111	91
Fatality	1	3
TOTAL	112	94





#### Emergency Ambulance Service (JAN – DEC 2006)

# Total Emergency Ambulance Service (EAS) Calls

The volume of EAS calls in 2006 hit 96,006. See Table 1. This is an increase of 7,343 cases (8%) over the 88,663 cases in 2005. About 91% (87,679 cases) of the EAS cases were emergency medical and trauma situations while about 6% (5,462 cases) were non-emergency situations. The remaining 3% (2,865 cases) comprise false alarm calls.

The breakdown for emergency cases is shown in Table 2. 70% (61,221 cases) were "medical cases" (e.g. cases involving breathlessness, pain, unconsciousness and cardiac arrest) and 30% (26,143 cases) were "trauma cases" (e.g. cases involving road traffic accident, industrial accident, fall and assault). The remaining 315 cases classified under "others" involved situations related to maternity emergencies and patients without clear illness symptoms.

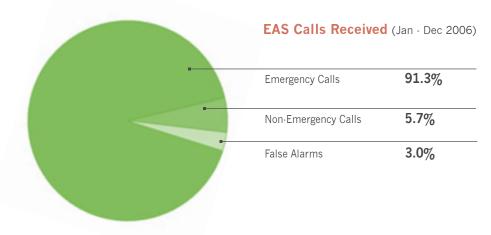


Table 1: Number and Types of Ambulance Calls

TYPE OF CALLS	2005	2006	Absolute Change
Emergency Calls	79,895	87,679	+ 7,784
Non-Emergency Calls	6,046	5,462	- 584
False Alarms	2,722	2,865	+ 143
Total	88,663	96,006	+ 7,343

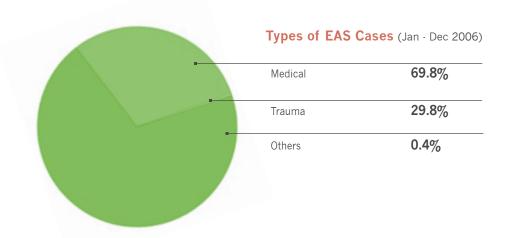


Table 2: Breakdown of Emergency Ambulance Calls

DESCRIPTION	2005	2006	Absolute Change
Medical	54,130	61,221	+ 7,091
Trauma	25,534	26,143	+ 609
Others	231	315	+ 84
Total	79,895	87,679	+ 7,784

#### Emergency Ambulance Service (JAN – DEC 2006)

#### **Emergency Calls**

Emergency calls rose from 79,895 in 2005 to 87,679 in 2006 (ie. 10% increase). The SCDF's response to emergency calls has been steadily climbing over the years. Considering that the SCDF responded to 64,878 cases in 2002, the number of emergency calls has increased by 22,801 cases (or 35%) in the last 5 years. See Graph 1.

#### **Non-emergency Calls**

Through greater awareness, the number of non-emergency calls last year dropped from 6,046 in 2005 to 5,462.

#### **False Alarms**

False alarm calls are situations in which SCDF emergency ambulances are called for but upon arrival, the crew does not find any person requiring medical assistance. Comparing with 2005, there was a 5% increase (143 calls) in such cases last year.

Graph 1: EAS Calls (2002 to 2006)







#### Fire Safety Enforcement Statistics (JAN - DEC 2006)

The SCDF conducts enforcement checks on a regular basis to ensure that fire hazards and violations are detected and rectified. A total of 11,123 enforcement checks were conducted in 2006, 1,020 (or 10%) more than the year before.

Under the Fire Safety Act, a Fire Hazard Abatement Notice (FHAN) serves as a warning. When the hazard is not abated, a Notice of Composition (NOC) between \$300 and \$500 would be issued – with court action being taken for serious cases. A Fire Safety Offence (FSO) is normally issued when the contravention is of a serious nature and warrants a heavier penalty than when a FHAN is served.

Last year, the SCDF served 751 Fire Hazard Abatement Notices (FHAN), an increase of 342 (84%) from the 409 FHAN issued in 2005. See Table 1.

The top 3 most common fire hazards spotted for which FHANs were served were poor maintenance of hosereels and fire extinguishers (174 FHANs), obstructed exit (110 FHANs) and storage within staircase/hosereel/riser (93 FHANs).

#### Nature of Fire Hazards Which Received FHANs (Jan - Dec 2006)

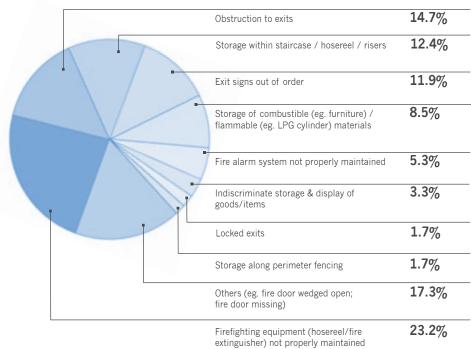


Table 1: Fire Hazard Abatement Notice (Breakdown by Type of Hazard)

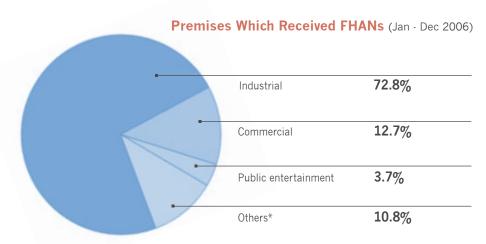
NATURE OF HAZARD	2005	2006	Absolute Change
Firefighting equipment (hosereel/fire extinguisher) not properly maintained	104	174	+70
Obstruction to exits	66	110	+44
Storage within staircase / hosereel / risers	26	93	+67
Exit signs out of order	31	89	+58
Storage of combustible (eg. furniture) / flammable (eg. LPG cylinder) materials	62	64	+2
Fire alarm system not properly maintained	20	40	+20
Indiscriminate storage & display of goods/items	20	25	+5
Locked exits	11	13	+2
Storage along perimeter fencing	11	13	+2
Others (eg. fire door wedged open; fire door missing)	58	130	+72
Total	409	751	+342

#### Fire Safety Enforcement Statistics (JAN – DEC 2006)

The bulk of FHAN served last year were issued to industrial premises which accounted for 73% (547 FHANs) of the total FHANs issuec' About 13% (95 FHANs) were issued to commercial premises and 4% (28 FHANs) to public entertainment outlets.

See Table 2.

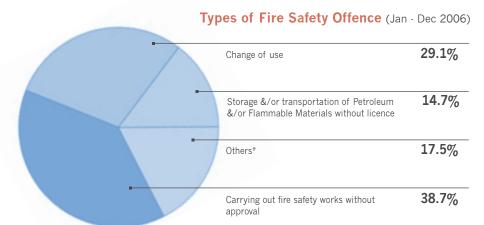
On the whole, the number of Fire Safety Offence (FSO) issued last year increased by 44% (ie. 99 FSO more) compared to 2005. See Table 3. FSO for carrying out fire safety works without approval rose by 67, while that for change of use of premises without approval inched up by 16. The enforcement checks conducted at 6 warehouses at Ubi Ave 4 and Woodlands Industrial Park detected over 60 unauthorised fire safety works contributing towards a rise in the issuance of FSO in 2006.



<sup>\*</sup>Others include residential premises, shophouses and community centres.

Table 2: Fire Hazard Abatement Notice (Breakdown by Premises)

TYPES OF PREMISES	2005	2006	Absolute Change
Industrial	275	547	+272
Commercial	51	95	+44
Public entertainment	34	28	-6
Others*	49	81	+32
Total	409	751	+342



<sup>\*</sup>Others include failure to obtain Fire Safety Certificate; failure to comply with fire safety guidelines for temporary buildings; and breach of Temporary Permit (TP).

Table 3: Number of Fire Safety Offence (Breakdown by Type of Offence)

TYPE OF OFFENCE	2005	2006	Absolute Change
Carrying out fire safety works without approval	59	126	+67
Change of use	79	95	+16
Storage &/or transportation of Petroleum &/or Flammable	20	40	.0
Materials without licence	39	48	+9
Others*	50	57	+7
Total	227	326	+99

#### Fire Safety Enforcement Statistics (JAN - DEC 2006)

There was an increase of 109 FSOs served to industrial premises last year. See Table 4. FSO for commercial premises however saw a decline of 4 cases. Violators were fined up to \$500 for each of the FSO.

#### Premises Which Received Fire Safety Offence (FSO) (Jan - Dec 2006)

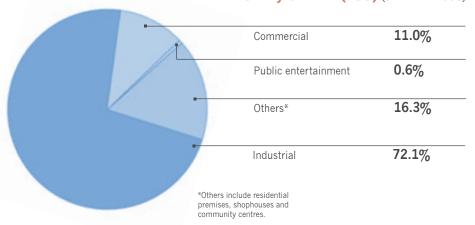


Table 4: Number of Fire Safety Offence (FSO)

TYPES OF PREMISES	2005	2006	Absolute Change
Industrial	126	235	+109
Commercial	40	36	-4
Public entertainment	1	2	+1
Others*	60	53	-7
Total	227	326	+99

Table 5 shows the increase in number of Notice of Composition (NOC) served to violators. Industrial properties were the main premises served with NOCs. In total, industrial premises received 55 NOCs.

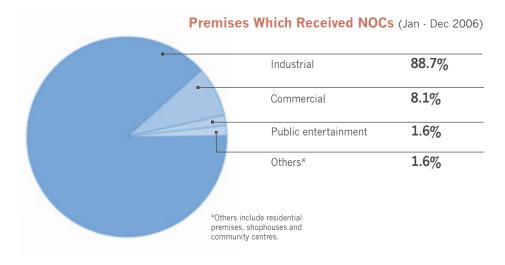


Table 5: Notice of Composition (Breakdown by Premises)

TYPES OF PREMISES	2005	2006	Absolute Change
Industrial	15	55	+40
Commercial	4	5	+1
Public entertainment	3	1	-2
Others*	_	1	+1
Total	22	62	+40

#### Fire Safety Enforcement Statistics (JAN - DEC 2006)

Table 6 shows the number of court cases in the last 2 years. There were 7 court cases in both years. See Table 7 on the breakdown of these cases by type of offence.

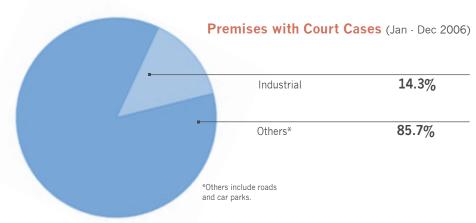


Table 6: Court Cases (Breakdown by Type of Premises)

TYPES OF PREMISES/LOCATION	2005	2006	Absolute Change
Industrial	1	1	0
Commercial	3	_	-3
Public entertainment	_	_	_
Others*	3	6	+3
Total	7	7	0

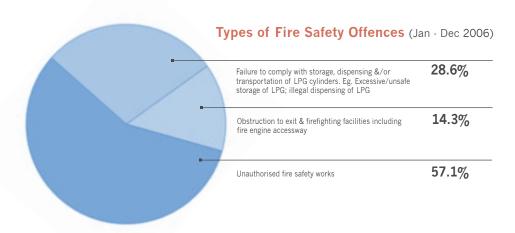


Table 7: Court Cases (Breakdown by Type of Offence)

DESCRIPTION	2005	2006
Failure to comply with storage, dispensing &/or transportation of LPG cylinders. Eg. Excessive/unsafe storage of LPG; illegal dispensing of LPG	4	2
Failure to keep in the cabin the original copy of the valid licence to transport petroleum or flammable materials	1	0
Obstruction to exit & firefighting facilities including fire engine accessway	1	1
Unauthorised fire safety works	0	4
Failure to comply with Temporary Permit (TP) conditions	1	0
Total	7	7







### Emergency Appliances (as at Dec 2006)

FIRE-FIGHTING		MEDICAL	
Aerial Ladder (52m)	2	Ambulance	54
Breathing Apparatus Tender	3	Fast Response Paramedic Bike	20
Chemical Tender	2	Station With Immediate First-Aid Treatment (SWIFT)	5
Combined Platform Ladder (30m)	13		
Combined Platform Ladder (53m)	2	HAZMAT	
Damage Control Tender	4	Foam Pod	16
Fire Bike	35	HazMat Control Vehicle	2
Foam Tender	4	HazMat Decontamination Pod	4
Hose Laying Truck	1	HazMat Pod	4
Large Monitor Vehicle	1	HazMat Support Pod	1
Light Fire Attack Vehicle	50	HazMat Support Vehicle	4
Pump Ladder	37	HazMat Tender	2
Rapid Mitigation Vehicle	1	Personnel Decontamination Vehicle	13
Tracked Fire-Fighting Vehicle	4	Special Decontamination Vehicle	6
Ventilation Vehicle	1		
Water Tender	2	SUPPORT	
		Command Vehicle	5
		Forward Command Vehicle	6
RESCUE		HazMat Enforcement Vehicle	3
Heavy Rescue Tender	1	Lighting Tender	2
Rescue Dog Tender	3	Recce Vehicle	1
Rescue Tender	4	Fire Investigation Vehicle	1
Skid Loader	2	Radio Mobile Vehicle	1
Special Rescue Tender	2	Inspection Vehicle	17
		Mobile Fire Post	1
		Pod Carrier	18



# 3APORE CIVIL DEFENCE FORCE ANNUAL REPORT 2007

## Highlights of Workyear 2006/2007

#### 7 Apr 2006

The Civil Defence Auxiliary Scheme was officially launched at the SCDF Workplan Seminar. The CDAU website was also established and launched in the SCDF Internet (www.scdf.gov. sg) for public access to information pertaining to the scheme, as well as to facilitate online application.



#### 18 Apr 2006

The SCDF Dining-In was held at the Orchid Country Club. As one of the highlights of the SCDF Pride and Care Day, the event is a traditional formal dining occasion where SCDF officers rededicate themselves to the SCDF's core values of PRIDE and CARE that it strives to uphold and imbue in the Force.



#### 21 Apr 2006

The SCDF hosted an official visit by Dato' Robert Lau, Deputy Minister for Local Government & Housing, Malaysia at the HQ  $4^{\rm th}$  CD Division.



#### **Apr 2006**

The SCDF introduced a new career track for full-time NSmen (NSF) with less than five 'O' level passes or Higher NITEC qualifications. NSF who possess Class 3 driving licence and exhibit good conduct and performance can join the SCDF as a Senior Ambulance Medical Orderly, who is required to drive the ambulance and assist the paramedic in providing basic medical aid to patients.

#### 10 May 2006

The new HQ 2<sup>nd</sup> CD Division cum Tampines Fire Station at Tampines Industrial Ave 3 was officially opened by Mr Wong Kan Seng, Deputy Prime Minister and Minister for Home Affairs.



#### 24, 25 & 30 May 2006

A total of 294 regular officers from the SCDF were promoted to the next higher rank during the Home Team Promotion Ceremony at the Suntec Singapore International Convention & Exhibition Centre and the SCDF Officers Promotion Ceremony at HQ SCDF. The first day of the promotion ceremonies also saw the promotion of 35 SCDF NS Senior Officers as it was the first time the NS Officers Promotion Ceremony was combined with that of the regular officers.

#### 28 May- 7 Jun 2006

Following a massive earthquake of magnitude 6.2 on the Richter Scale that ripped through Central Java on 27 May, the SCDF despatched a 43-member Operation Lionheart contingent and an 11-member medical team to the quake zone to assist the Indonesian authorities with search and rescue operations. During the stint, the contingent treated more than 520 casualties. In addition, the SCDF's Asia Pacific Humanitarian

Partnership (APHP) team also provided communications support to the United Nations Disaster Assessment and Coordination (UNDAC) team operating in the disaster area.



#### Highlights of Workyear 2006/2007

#### 31 May 2006

His Excellency Shivraj Vishwanath Patil, Minister of Home Affairs, India paid a visit to the SCDF.

#### 7 Jun 2006

His Excellency Sheikh Abdullah Bin Nasir Bin Khalifa Al-Thani, Minister of State for Interior Affairs, Qatar, visited the SCDE



#### 20 Jun 2006

The new Basic Rescue Training Centre (BRTC) was officially opened by Assoc Prof Ho Peng Kee, Senior Minister of State for Law and Home Affairs. Standing on a total land area of 4.4 hectare, the new BRTC training ground boasts of several state-of-the-art facilities aimed at augmenting the training and instruction processes. In addition, the co-location of BRTC with the Civil Defence Academy to form a single training establishment collectively known as the CDA Complex allows for efficient sharing of resources such as a common 24-hour Medical Centre and logistics support element between the two training schools.



#### 28 Jun 2006

Tuan Haji Nasir Bin Mat Dam, Director-General of the Malaysian Civil Defence Department visited the SCDF.

#### Jun 2006

The SCDF successfully renewed the People Developer Standard for another three years.

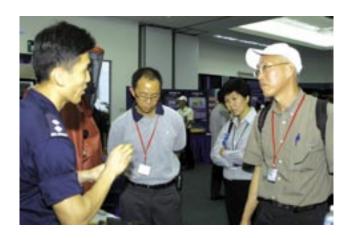
#### 3 Jul 2006

LTC Yazid Abdullah handed over the command of the  $4^{\rm th}$  CD Division to LTC Francis Ng after five years on the job.



#### 28 Jul 2006

The SCDF hosted the Emergency Preparedness Seminar at the Civil Defence Academy for principals, Heads of Departments and Operations Managers from some 100 secondary schools in an effort to beef up community preparedness within the schools.



#### 1 Aug 2006

The SCDF was conferred the Dale Carnegie Leadership Award 2006 by Dale Carnegie Training, one of the world's leading human resource and management consulting organizations. The award is granted to companies that place special emphasis on the development of its human resources, innovation and organisational creativity for the purpose of achieving their business objectives. The SCDF is the second local organisation to be given this award.

#### 3 Aug 2006

The latest edition of the "Technical Requirements for Storey Shelters 2006" was launched. These latest shelter guidelines incorporated a number of changes in shelter requirements, including the Staircase Storey Shelter design guidelines, taking into account feedback from professionals/designers and the building trends.

#### 4 Aug 2006

The 13<sup>th</sup> CD Skills Competition witnessed a record-breaking number of international participants in 2006 and was successfully conducted with the participation of SCDF staff and 52 foreign participants from seven countries - Brunei, Malaysia, Thailand, Hong Kong, Indonesia, Philippines and Macau.



#### 14 Aug 2006

Five Stations With Immediate First-aid Treatment (SWIFTs) were operationalised at the Civil Defence Academy. Besides allowing the Medical Platoon from the Rescue Battalion on In-Camp Training at CDA to turn out for actual operations when activated, it also gives the Platoon an opportunity for exposure to actual mass casualty situations.

#### 14 Aug 2006

The SCDF hosted a visit by His Honourable Ambrose Lee Siu Kwong, Secretary for Security, Hong Kong.



#### 9, 23 & 30 Sep 2006



For the first time, the organisation of the SCDF Community Bonding Day was decentralised to each of the four CD Division Headquarters and jointly organised with the Civil Defence Executive Committees. Held over three

Saturdays, the Community Bonding Days attracted a turnout of close to 13,000 members of the public.

#### 11 - 20 Sep 2006

The SCDF was the Incident Manager for any consequent management required during the 2006 International Monetary Fund and World Bank Annual Board of Governors Meetings in Singapore. Close to 1,000 personnel and 124 appliances from the SCDF, Ministry of Health and the Singapore Armed Forces were deployed for operational standby duties during the 10-day period of the event.

#### 12 Sep 2006

The annual MHA progress updates to the Public Service Commission (PSC) was held in tandem with a site visit to the SCDF. During the site visit hosted at the Civil Defence Academy, the members of the PSC were introduced to an array of the SCDF's innovative vehicles and equipment.



#### 15 Sep 2006

The annual CD Day Parade was held for the first time at the new Basic Rescue Training Centre housed within the CDA Complex at Jalan Bahar. Assoc Prof Ho Peng Kee, Senior Minister of State for Law and Home Affairs was the Guest-of-Honour for the event, which saw the attendance of about 400 guests and 200 SCDF officers.

# SINGAPORE CIVIL DEFENCE FORCE ANNUAL REPORT 2007 • 2

#### 26 Sep 2006



Highlights of Workyear 2006/2007

The SCDF welcomed the first batch of 24 personnel from the Qatar Civil Defence Department to attend the specially customised seven-week International Firefighting Course at the Civil Defence Academy.

#### 29 Sep 2006



The inaugural SCDF
Appreciation Dinner
was organised at
the Istana to thank
the SCDF's strategic
partners, Home
Team counterparts,

Civil Defence Executive Committee Chairmen from the 84 constituencies, regular officers and National Servicemen for their extraordinary support rendered to the SCDF over the last 25 years. Assoc Prof Ho Peng Kee, Senior Minister of State for Law and Home Affairs also presented awards to 32 Strategic Partners from various ministries, statutory boards and private organisations that have continually played active roles to support the SCDF. About 400 guests turned up for the event.

#### 6 Oct 2006

His Excellency K. M. Singh, a member of the National Disaster Management Authority in India, visited the SCDF.

#### 12 - 13 Oct 2006



The 4th Asian Crisis Management Conference was held in Singapore and graced by Assoc Prof Ho Peng Kee, Senior Minister of State for Law and Home Affairs. A total of 65 participants from 9

cities - Bangkok, Hanoi, Jakarta, Kuala Lumpur, Seoul, Taipei, Tokyo, Yangon and Singapore - attended the conference at Orchard Hotel, where several topics of concern were presented and discussed.

#### 18 Oct 2006

The SCDF collaborated with the National Fire Prevention Council (NFPC) to launch the inaugural Fire Safety Drive at the Furama Hotel to engage the community through a series of mini-campaigns, stringed together by the overarching theme of "Fire Destroys: Let's Prevent It!".



#### 25 Oct 2006



An Implementing Agreement was signed between the Qatar Civil Defence Department and the SCDF at the HomeTeamNS @ Bukit Batok Clubhouse, formalising the three-month attachment of four SCDF officers to Qatar Civil Defence Department in Nov 2006.

#### 26 Oct 2006

The MHA Award for NSmen's Employers 2006 was held at the Suntec Singapore International Convention & Exhibition Centre. A record number of 79 awards were presented to deserving employers, the highest number since the inauguration of the event. This year also saw an unprecedented number of five companies winning the Special Award – the highest distinction conferred on companies which have demonstrated consistent and outstanding support to their employees' NS activities.



#### 30 Oct 2006

The post of Company Sergeant Major was introduced in all fire stations as part of career progression for the SCDF's Emergency Response Specialists who have served as Deputy Rota Commanders for more than four years.

#### 6 Nov 2006

A new electronic NS Portal was launched. The new portal unifies the previously independent NS websites of the Singapore Armed Forces (SAF), the Singapore Police Force (SPF) and the SCDF under a common website. The new portal also brings to the NSmen a wider range of lifestyle services and commercial offerings, such as merchant discounts and vouchers.



#### 17 Nov 2006

The 'Road Courtesy Campaign 2006' was launched at the Singapore



Expo. In partnership with the Traffic Police, the SCDF introduced the 'Drive with a Heart, Give Way to Emergency Vehicles' Award as part of the campaign.

#### 29 Nov 2006

Permissible variations for Household Shelter Technical Requirements were established and released to enhance flexibility in design and layout.

#### 14 Dec 2006

The Operations Readiness Information On-line (ORION) system was operationalised to serve as a platform to capture and maintain operations data.

#### 13 Jan 2007

The SCDF Family Day was held at the HomeTeamNS @ Bukit Batok Clubhouse. The event comprised carnival game stalls, parenting workshops, children's workshops, stage performances and entertainment activities to cater to staff and family members of different generations.



#### 19 Jan 2007

Mr Joe Kwok Jing-keung, President of the Institution of Fire Engineers (Hong Kong Branch) & Director of Hong Kong Fire Services, visited the SCDF.

#### 1 Feb 2007

The presentation ceremony for the Minister's Award for Operational Excellence was held at the MHA Auditorium. A total of 27 SCDF officers received the Award for their outstanding operational efficiency and competence from the Guest-of-Honour, Assoc Prof Ho Peng Kee, Senior Minister of State for Law and Home Affairs.



#### 2 - 22 Feb 2007

The SCDF participated in the inaugural Total Defence Exhibition, themed 'Combating Terrorism' at the Singapore Discovery Centre to acquaint members of the public with the role of the SCDF through various interactive games and vehicular displays.



#### 4 Feb 2007

The Bukit Timah Fire Post was officially opened by Mrs Yu-Foo Yee Shoon, Minister of State, Ministry of Community Development, Youth and Sports, and Adviser to



Holland-Bukit Timah Grassroots Organisations.

#### 27 - 29 Mar 2007

The Global Security Asia 2007 was held at the Singapore Expo. Co-hosted by the MHA, the event consisted of a conference and exhibition which brought together experts in the field of homefront security, as well as showcased technology solutions to problems of security and counter-terrorism. The three-day event attracted some 500 regional conference delegates and approximately 6,000 international trade and professional visitors and VIP delegations from the Asia Pacific Region and beyond.



# **Directory of Facilities**



Civil Defence Academy 101 Jalan Bahar Singapore 649734 Tel: 6794 5503/4 Fax: 6794 5505

Jurong Island Fire Station

No. 70 Jurong Island Highway Jurong Island

Singapore 627880 Tel: 6267 4712/3

Fax: 6266 4717



**Bishan Fire Station** 1 Marymount Lane Singapore 574029 Tel: 6355 5031/2 Fax: 6252 3294

Toa Payoh Fire Post Blk 46 Toa Payoh Lorong 5 Singapore 310046 Tel: 6478 2657/2658



**HQ Singapore Civil Defence Force** 91 Ubi Avenue 4 Singapore 408827 Tel: 6280 0000 Fax: 6284 2048



HQ 1st CD Division 3 Queensway Singapore 149073 Tel: 6471 7426 Fax: 6471 7490



Alexandra Fire Station 3 Queensway Singapore 149073 Tel: 6471 7481 Fax: 6471 7487

#### **Bukit Merah View Fire Post** Blk 121 Bukit Merah View Singapore 151121 Tel: 6377 7210/1/2

**Telok Blangah Fire Post** Blk 75 Telok Blangah Heights Singapore 100075 Tel: 6377 7220/1/3



Civil Defence Basic Rescue Training Centre CDA Complex 91 Jalan Bahar Singapore 649735 Tel: 6794 5723 Fax: 6794 5725



**Central Fire Station** 62 Hill Street Singapore 179367 Tel: 6332 3000/9 Fax: 6339 4589

Boon Keng Fire Post Blk 4 Boon Keng Road #01-98 Singapore 330004 Tel: 6391 1078/9

Cairnhill Fire Post Cairnhill Community Club, 1 Anthony Road Singapore 229944 Tel: 6732 2104



Commonwealth Ave West Off Clementi Service Road Singapore 129557 Tel: 6341 1100/9 Fax: 6776 4480

Clementi West Fire Post Blk 712 Clementi West St 2 #01-165 Singapore 120712 Tel: 6874 7627/8



Paya Lebar Fire Station 91 Ubi Avenue 4 Singapore 408827 Tel: 6848 1850/1 Fax: 6848 1860

Mountbatten Fire Post Blk 12 Kg Arang #01-01 Singapore 431012 Tel: 6346 2176/2177

Marine Parade Fire Post Blk 15 Marine Terrace #01-34 Singapore 440015 Tel: 6446 7031/7034

Geylang East Fire Post Blk 133 Geylang East Ave 1 Singapore 380133 Tel: 6848 3215/6/7



HQ 2nd CD Division 1 Tampines Industrial Ave 3 #01-01 Singapore 528777 Tel: 6587 8339 Fax: 6587 4536



**Tampines Fire Station** 1 Tampines Industrial Ave 3 #01-01 Singapore 528777 Tel: 6587 8344/45 Fax: 6587 8346



**Changi Fire Station** 491 Upper Changi Road Singapore 456966 Tel: 6543 3900/6542 4988 Fax: 6545 2011

Chai Chee Fire Post Blk 45 Chai Chee St Singapore 461045 Tel: 6446 7061/7062

Pasir Ris Fire Post Blk 105 Pasir Ris St 11 Singapore 510105 Tel: 6582 2170

**Tampines Fire Post** Blk 438 Tampines St 43 Singapore 520438 Tel: 6260 6011

Loyang Fire Post 982 Upper Changi Rd North Singapore 507709 Tel: 6543 3910



**Sengkang Fire Station** 

50 Buangkok Drive Singapore 545064 Tel: 6312 7002/3/4 Fax: 6385 1467

Braddell Heights Fire Post Blk 203 Serangoon Central Singapore 550203 Tel: 6382 2148

#### Punggol North Fire Post Blk 176A Edgefield Plains

#01-158 Singapore 821176 Tel: 6315 8650/1/2



HQ 3<sup>rd</sup> CD Division 533 Yishun Industrial Park A #01-01 Singapore 768774 Tel: 6852 2888/588 Fax: 6852 2988/928



Yishun Fire Station 533 Yishun Industrial Park A #01-01 Singapore 768774 Tel: 6852 7995/895 Fax: 6852 8995

Nee Soon Central Fire Post Blk 635 Yishun St 61 Singapore 760635 Tel: 6257 2271



#### Ang Mo Kio Fire Station

2874 Ang Mo Kio Ave 9 Singapore 569783 Tel: 6484 3101/2 Fax: 6481 0277

**Teck Ghee Fire Post** Blk 463 Ang Mo Kio Ave 10 #01-1132 Singapore 560463 Tel: 6553 5010



**HQ 4th CD Division** 80 Bukit Batok Road Singapore 658072 Tel: 6314 6906/907 Fax: 6314 6937/938



Bukit Batok Fire Station 80 Bukit Batok Road Singapore 658072 Tel: 6314 6931/932

#### Fax: 6314 6941 **Bukit Timah Fire Post**

20 Toh Yi Drive Bukit Timah CC Singapore 596569 Tel: 6464 5291 Fax: 6464 5292

Bukit Panjang Fire Post Blk 126 Pending Road #01-306 Singapore 670126 Tel: 6767 1045

# Choa Chu Kang Fire Post Blk 281 Choa Chu Kang Ave 3 Singapore 680281 Tel: 6767 1042/3/4

#### Tuas Fire Station

7 Tuas Road Singapore 638482 Tel: 6865 4180/1 Fax: 6862 2344

#### Tuas West Fire Post Tuas Checkpoint 2<sup>nd</sup> Link Tel: 6865 4723



# Jurong Fire Station 25 Boon Lay Drive Singapore 649922 Tel: 6267 4700/1 Fax: 6261 5614

Jurong East Fire Post Blk 318A Jurong East Ave 1 #01-308 Singapore 600318 Tel: 6665 5133/4/5

Jurong West Fire Post Blk 712 Jurong West St 71 Singapore 640712 Tel: 6792 5130/5129



Woodlands Fire Station 1 Woodlands Industrial Park D Street 2 Singapore 738799 Tel: 6884 1350/1 Fax: 6269 3626

Woodlands Fire Post Blk 855 Woodlands St 83 #01-72 Singapore 730855 Tel: 6365 1173

Sungei Kadut Fire Post No. 8 Sungei Kadut St 3 Singapore 729154 Tel: 6884 1771/2

#### National Civil Defence Cadet Corps

Home Team Academy Blk 12B #02-95 501 Old Choa Chu Kang Road Singapore 698928 Tel: 6314 6766 Fax: 6314 6768

HomeTeamNS @ Bukit Batok 2 Bukit Batok West Ave 7 Singapore 659003 Tel: 6665 4600 Fax: 6569 4453

#### HomeTeamNS-JOM @ Balestier

31 Ah Hood Road Singapore 329979 Tel: 6478 2506 Fax: 6256 7137

HomeTeamNS @ Chinatown 31-35 Smith Street Singapore 058945 Tel: 6325 9248 Fax: 6536 6056

#### HomeTeamNS @ UE Square

81 Clemenceau Ave #03-17/18 UE Square Shopping Mall Singapore 239917 Tel: 6835 8250 Fax: 6235 7209

HomeTeamNS @ Sembawang 301 Canberra Road Singapore 759774 Tel: 6757 7100 Fax: 6754 0411

#### HomeTeamNS @ Pasir Ris

125A-125H Pasir Ris Road Singapore 519121 Tel: 6581 9149 Fax: 6581 9149

