SEARCH / RESCUE

FESA provides a variety of search and rescue services, primarily in support of the Western Australia Police Service.

These range from operation of the state’s only dedicated emergency rescue helicopter service to marine search and rescue, in addition to a recently-enhanced capability to deal with casualties of terrorist activities.

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URBAN SEARCH AND RESCUE ..................... 80
Aerial rescue

RAC Rescue 1 is Western Australia’s only dedicated emergency rescue helicopter.

The service provides:

- Emergency rescues, eg. For the victims of car crashes, cliff rescues, farming accidents
- Ship to shore rescues including responding to Emergency Position Indicating Radio Beacons
- Hospital transfers for critically ill patients.

PREPAREDNESS

RAC Rescue 1 and its highly trained crew are on standby, ready to fly 24 hours a day, 365 days a year. The helicopter is crewed by a pilot, rescue crewman (both supplied under contract by CHC Helicopters Australia) and a St John Ambulance Critical Care Paramedic.

Stationed at Jandakot Airport, Perth, RAC Rescue 1 typically operates within a 200km radius, covering 90% of Western Australia’s population or 1.8 million people. The Emergency Rescue Helicopter Service is managed by FESA and is funded by the State Government and principal sponsor, the Royal Automobile Club of Western Australia (RAC).

Call outs are usually initiated by, or through St John Ambulance, or at the request of the WA Police. Critical life-saving missions take precedence over any other call out.

NEW FACILITIES

The response time of the rescue helicopter will improve thanks to the allocation of $900,000 for an integrated base at Jandakot Airport. The new facility will have a hangar, planning and operations room and accommodation housed under the same roof. When the base is built (expected to be in 2006-2007), the target response time for the helicopter to be airborne will be reduced from 20 minutes to 15 minutes.

PROMOTION

To promote the Emergency Rescue Helicopter Service capability, over the past year live demonstrations were provided at community events and for a number of emergency services, including:

- the IFAP Emergency Response Games
- Australia Day Sky Show
- Hillarys Boat Show
- the Whitfords Volunteer Sea Rescue Group
- the Perth Royal Show
- RAC Centenary Rally
- annual camp of the Emergency Services Cadet Corps

The service was also involved in a number of training exercises including multi-agency training with the Australian Defence Force at Lancelin.

RESPONSE

In 2005-2006, the Emergency Rescue Helicopter Service undertook 217 missions. Of these:

- 60% (130) were primary taskings, attending on scene at rescue incidents
- 13% (27) of missions were for retrievals of critically ill patients from regional hospitals to metropolitan tertiary hospitals
- 25% (54) of missions were search and rescue, most often in response to the activation of an Emergency Positioning Indicating Radio Beacon. These missions were requested either by the Australian Maritime Safety Authority through the Australian Search and Rescue Coordination Centre in Canberra, or the Western Australia Police.
Two percent of missions were listed as ‘other’. These included a request for an assistance flight by WA Police, which did not fall into any of the above categories. The helicopter was also used to gather data with an infrared camera for research into the effectiveness of peat fire suppression at Lake Neerabup.

Of all missions, approximately 34% (74) were in response to motor vehicle and motorcycle crashes.

The average activation (response) time was 15.2 minutes against a timeliness target of 20 minutes.

Flight time logged in the air for rescues (mission hours) constituted 254 hours as against an estimated 330 hours. Each mission averaged 1.17 hours as against 1.98 in 2004-2005. There were less hours as fewer missions were flown.

As only a limited number of operational personnel are involved in the rescue helicopter, their number is not included in the operational total of those ready to respond. The cost of the service cannot be included as representative of the general cost of response. However, the service can be considered separately and be costed by its mission hours as an efficiency indicator as seen in the following table.

### AVERAGE COST PER MISSION HOUR WESTERN AUSTRALIAN EMERGENCY RESCUE HELICOPTER SERVICE

<table>
<thead>
<tr>
<th></th>
<th>2003-04</th>
<th>2004-05</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of mission hours (a) (b)</td>
<td>330</td>
<td>387</td>
<td>254</td>
</tr>
<tr>
<td>Total expenditure $'000</td>
<td>3,800</td>
<td>3,921</td>
<td>3,950</td>
</tr>
<tr>
<td>Average cost per mission hour $  (c)</td>
<td>11,515</td>
<td>10,132</td>
<td>15,551</td>
</tr>
</tbody>
</table>

(a) Mission hours are actual hours in the air (ie. flight time) for rescues and other activities.  
(b) Variance in mission Hours for 2005-2006: Fewer extended distance rescues were flown this year.  
(c) Cost of helicopter service is linked to Consumer Price Index (CPI) and will increase each year. Total expenditure includes time on the ground, even if no missions are activated.

### NOTABLE INCIDENTS

**NORTHAM – 18 August 2005**
RAC 1 transferred a woman with serious injuries to Royal Perth Hospital after the car she was driving near Northam left the Great Eastern Highway and hit a tree at high speed. Firefighters took more than 90 minutes to extricate the woman from the car wreckage. RAC landed in a paddock next to the highway to attend to the woman.

**DUNSBOROUGH – 17 September 2005**
A man was washed off Sugarloaf Rock near Dunsborough by a large wave and broke a leg in two places. Ambulance officers could not lift the man over treacherous rocks so RAC 1 was called in from Perth to winch the man off the rocks. He was then flown to Bunbury Regional Hospital.

**COLLIE – 21 OCTOBER 2005**
RAC 1 flew two seriously injured women to Royal Perth Hospital after the car in which they were travelling collided with another vehicle on Wellington Dam Road near Collie. Firefighters had to cut the roof from the car to extricate them.

**BALDIVIS – 25 OCTOBER 2005**
A critically injured child was flown by RAC 1 to Royal Perth Hospital after the bus in which she and 20 other year-eight students were travelling collided with a semi trailer on Mandurah Road, Baldivis.
HENDERSON – 20 NOVEMBER 2005
A 38-year-old man was rushed to hospital by RAC1 in a critical condition with suspected head, leg and spinal injuries after a trail bike accident in Henderson.

AUGUSTA – 30 NOVEMBER 2005
The RAC 1 helicopter made a mercy dash to a coal freighter off the Augusta coast to rescue a man suffering from severe abdominal pains.

PINGELLY – 28 DECEMBER 2005
A boy was airlifted to Sir Charles Gairdner Hospital’s Poisons Treatment Centre after being bitten a dugite.

PINGELLY – 18 February 2006
A Pingelly woman was flown to Royal Perth Hospital after she received serious burns as a result of fuel igniting.

TOODYAY – 22 January 2006
A man with arm and shoulder injuries and a woman with chest injuries were taken to Royal Perth Hospital after being involved in a serious motorcycle accident in Toodyay.

WEDGE ISLAND – 5 March 2006
Four people were flown to hospital after two motorcycle accidents at Wedge Island. The patients who had spinal and multiple injuries, were airlifted by the rescue helicopter to Royal Perth and Sir Charles Gairdner Hospitals.

CERVANTES – 23 June 2006
RAC 1 flew a man to Royal Perth Hospital who had lost an arm in a crayfishing accident.
Cliff and cave rescue

VOLUNTEERS from State Emergency Service units and some Volunteer Emergency Service units are trained to undertake vertical rescues on cliffs and in caves. These volunteers provide a support role for the Western Australia Police Service, the hazard management agency for land search and rescue. Volunteer Emergency Service units may also participate in cliff and cave rescues.

RESPONSE
SES volunteers undertook 15 cliff rescues during the reporting period. No cave rescues were required. In total, 481 volunteer hours were spent in response.

NOTABLE INCIDENTS
KARIJINI NATIONAL PARK – 6 March 2006
A 30-year-old Dutch woman was lifted out of Mena Gorge by a SES cliff rescue team after she slipped and injured her hip. The incident prompted renewed calls for regulation of adventure tour operators in WA.

KARIJINI NATIONAL PARK – 25 June 2006
A 56-year-old Victorian woman was rescued by SES volunteers after she slipped and fell three metres into Dale’s Gorge. At the time, it was suspected the woman had a broken leg or hip and she had to be transported out of the gorge by stretcher.

RECOVERY
PROGRESS ON KARIJINI REPORT RECOMMENDATIONS
A major incident review was undertaken by FESA following the tragic death of a State Emergency Service volunteer during a cliff rescue operation in Karijini National Park in April 2004. As a result of the review, 65 recommendations were developed and in January 2006, the FESA Regional Director Pilbara was given carriage to ensure the report recommendations were finalised.

In response to recommendation 43, an independent review was commissioned into vertical rescue equipment, techniques and training within FESA. The objective of the review is to enable the development of a single, whole-of-FESA standard and approach to vertical rescue.

Specific terms of reference include a review of the following areas in relation to State Emergency Service and Fire and Rescue Service vertical rescue:
- existing vertical rescue equipment
- vertical rescue techniques, training, policy, procedures and standards
- vertical rescue qualifications and the recognition of prior learning/current competency processes
- other matters relevant to the organisation’s vertical rescue operations.

As part of the contract the consultant is preparing a report for FESA’s Chief Executive Officer that:
- details a standard of approved modern vertical rescue equipment that takes into consideration the unique Western Australian environment and FESA’s vertical rescue responders
- comments on best practice techniques, training (initial and maintenance), policy, procedures and standards for FESA vertical rescue
- outlines a structure to manage vertical rescue organisational requirements.

It is anticipated that the report will be available early in the 2006-2007 financial year.
FESA has been working with other agencies including the Department of Environment and Conservation and WA Police Service to progress the implementation of other recommendations in the Karijini report. These include the installation of emergency rescue points and fixtures and the development of radio communications plans. FESA has upgraded Tom Price communication repeater facilities at Mt Nameless and in July/August 2006 will improve additional repeaters on CALM radio towers. These installations have already resulted in vastly improved communications between Tom Price and Karijini National Park.

A specific priority was to conduct an exercise to test existing standing operating procedures for response to incidents in the park. This was fulfilled when the Karratha State Emergency Service held a detailed exercise from 28-30 April 2006. Subsequently, FESA regional staff, volunteers from the Tom Price and Newman SES, CALM staff and local police held a comprehensive exercise in June to test regional inter-agency arrangements. To ensure all services were working from the same information base, FESA distributed topographical maps to all Volunteer Emergency Service units within the region and to the local police.

In order to improve response times to incidents in the park, FESA has allocated a new seven-seat vehicle to the Tom Price SES. This is in the current FESA vehicle build program and will be delivered to the unit as soon as possible.

In consultation with volunteers from the Newman SES unit, and after a trial of waterproof cases, FESA has undertaken to purchase waterproof radios for both the Newman and Tom Price SES. The new equipment will be provided early in 2006-2007.
Land and air search

The Western Australia Police Service is responsible for managing land and air search and rescue but FESA’s State Emergency Service (SES) and Volunteer Emergency Service units provide skills and resources to assist.

Assistance is in the form of fully trained and self-contained teams of volunteers who work under the leadership of volunteer field search controllers. Most of the searches are for missing people but they also have sought criminal evidence such as murder weapons. Air search can also be conducted in support of marine rescue. Among the resources made available to Police are a horseback mounted section and tracker dogs.

PREPAREDNESS

REGIONAL EXERCISES
Forty SES volunteers from the Karratha, Onslow, Port Hedland, Tom Price, Newman and Pilbara Regional Operations units took part in a major exercise at Eagle Rock Pools to test their skills in land search, communications, maps and navigation and cliff rescue.

TRAINING

Protect and Preserve Incident Scene
A Unit of Competency from the Certificate III in Public Safety (SES Rescue), Protect and Preserve Incident Scene (PUALAW001A), was embedded into the new Land Search training resource kit and distributed to land search trainers. Staff and volunteers who had already achieved Search as a Member of a Land Search Team (PUASAR008A) were able to meet this extra competency through a 90-minute gap course.

All future Land Search training resource kit courses will automatically incorporate this new competency. SES personnel across Western Australia will achieve the two competencies on completing the Land Search training program.

Land Search Team Leader / Field Search Controller
Development of training materials for Land Search Team Leader and Field Search Controller courses commenced following reviews with WA Police. The reviews looked at the role of SES in land search and the current training material. The new training will bring these higher level training courses into line with FESA’s training for Land Search, which was adopted nationally as the base level in 2004-2005.

RESPONSE

SES volunteers spent a total 865 hours undertaking 124 searches during 2005-2006.

NOTABLE INCIDENTS

NORTH BANNISTER – 10-12 AND 22 AUGUST 2005
A 42-year-old father of five was the centre of a major search after he failed to return home from his office in Balcatta. He had left without his wallet or mobile phone. The man’s vehicle was located in North Bannister. SES units from Boddington, Murray, Mandurah, Collie, Waroona and regional staff were activated in the search. A month after he was reported missing, the man was discovered by chance living in a derelict house in Bunbury.
PINJARRA – 5 OCTOBER 2005
SES units from Murray, Mandurah, Waroona, Boddington, Harvey, Collie and Australind were involved in a race against time to find a 13-year-old diabetic boy who had run away from home with only enough insulin to last him three days. The search – which involved 200 people, including the WA Police Airwing, horseback searchers and community members – ended in tragedy when the boy’s body was found.

KALBARRI – 5 OCTOBER 2005
SES volunteers were involved in a massive search for two men swept out of a dinghy at the mouth of the Murchison River. Police, marine rescue volunteers and aircraft were involved in the search for the men, last seen at Frustration Reef, only 100 metres off shore, before a large wave swamped their boat. The body of one man was found. Partial remains of the other man were found six weeks after the incident. Two other men in the boat survived after they were washed on to the reef.

FITZGERALD RIVER NATIONAL PARK – 8 October 2005
SES volunteers joined sea search and rescue volunteers, police, CALM staff and community members in a five-day search for a fisherman swept off rocks at Caves Point, 14km west of Hopetoun. A RAAF helicopter with infrared equipment and an aircraft from Esperance Air Service were also involved in the search. The man was not found.

GEIKIE GORGE NATIONAL PARK – 31 October - 2 November 2005
Volunteers from SES and Volunteer Emergency Service units joined police, CALM staff and the Bayulu Aboriginal Community in an extensive three-day search for a 63-year-old German tourist in Geikie Gorge National Park. The volunteers undertook the search in extreme heat and topography to find the woman, who was last seen walking with a large group of German tourists. Her body was found after she apparently fell from a ledge.

MEEKATHARRA – 19-20 MARCH 2006
SES volunteers were part of an air and land search for two men and a woman who failed to arrive at a mine site 150km north of Meekatharra. The men, who had left their vehicle after it became bogged, were found in separate locations. The body of the mother of two was found on the second day of the search.
Marine search and rescue

FESA supports 33 volunteer marine rescue groups that are formally approved under legislation. It has also established a service delivery arrangement with the Metropolitan Volunteer Sea Rescue Group which has three member groups operating in the Perth metropolitan region.

The approved Volunteer Marine Rescue Services (VMRS) groups are involved in a wide variety of marine emergency management activities. These include:

- assisting WA Police to search for missing people or vessels
- providing help to drifting vessels
- assisting in operations to remove grounded or submerged vessels
- providing a ‘sail plan’ notification service for boat owners
- monitoring marine radio services
- providing training in small-craft proficiency courses, communications and safety
- providing information to boat owners on appropriate actions to take during an emergency at sea.

PREVENTION

IMPROVED SAFETY FOR CRAYFISHERMEN

VMRS has stepped up distribution of its fishing tags, a simple and effective initiative aimed at preventing injury to crayfishermen caused by snagged fishing hooks, lines and sinkers on craypot lines. There are 5,000 tags now available free of charge in tackle shops, fishing clubs and FESA offices.

The tags – the brainchild of a Lancelin volunteer and developed by FESA – simply warn crayfishermen of any fishing line and tackle that has been snagged on craypot lines and cut free. Marine rescue volunteers have witnessed many accidents involving craypots. Crayfishermen have received head injuries and hooks through their hands from snagged lines when retrieving craypots.

The tags are packaged in a handy plastic bag that bears an important message reminding fishermen to log on and log off with their local volunteer marine rescue group before and after a fishing trip. The life of the log on-log off message is extended as the bag can be reused for various functions on a boat.

PREPAREDNESS

NEW EQUIPMENT AND FACILITIES

FESA approved a number of capital grant applications from Volunteer Marine Rescue Service (VMRS) groups for the 2005-2006 financial year.

The current reporting period was the second year of an ongoing VMRS hull and motor replacement program, designed to improve the overall safety and standards of the VMRS fleet. The program was the result of a commitment by the State Government to significantly increase the level of funding available annually for vessel replacement.

Under the requirements of the program there is an expectation that volunteers raise up to 50% of the cost of the vessel and or motors required.

The FESA VMRS Consultative Committee, in consultation with the FESA VMRS Coordination Unit, approved thirteen capital funding applications for 2005-2006, with an overall project total of $1,594,000.
The approved funding was for:

- five new or replacement rescue vessels (for Walpole, Port Denison, Margaret River, Bremer Bay and Dampier)
- construction of a new operations centre in Busselton
- various vessel equipment and motor upgrades
- refurbishment of the Volunteer Sea Rescue Group headquarters in Rockingham.

RESOURCING VOLUNTEERS

A new vessel for Port Denison is currently under construction and will be delivered in 2006-2007. Similarly, the construction of the Busselton Operations Centre is in progress.

During 2005-2006, vessels were delivered to the following groups:

- Fremantle – August 2005
- Broome – September 2005
- Whitfords – October 2005
- Derby – October 2005
- Mandurah – December 2005
- Margaret River – January 2006
- Bremer Bay – March 2006
- Dampier – May 2006

BLACK SPOT COMMUNICATIONS

FESA has been allocated funds by the State Government to address black-spot marine VHF communication areas along the coastline of Western Australia. This project aims to provide necessary marine radio communications during operations in areas where the signal constantly drops out.

In 2005-2006, four repeaters were installed: two in Wyndham and one each in Walpole and Bremer Bay. This brings the total number to 11 since this program began in 2003-2004. Other sites are being assessed for potential future installations.

NEW SAFETY PROMOTION TOOL

A new interactive display panel has been created to encourage recreational boaters to log on and log off with their local volunteer marine rescue group when they embark and return from a journey to sea. Volunteer marine rescue groups offer this safety marine radio service to all mariners throughout Western Australia, so that an early alarm can be raised if a vessel does not return as planned.

The display, the first of its kind in the state, includes a mock boat dashboard with a working VHF marine radio. This radio enables event visitors to practice logging on and off with a volunteer manning the stand. The display also has a number of safety messages playing on a television monitor.

The display was unveiled at the Perth International Boat Show and considerable interest was received from the boating public. VMRS groups can book the display for use at local community events.

INAUGURAL CONFERENCE

The first Volunteer Marine Rescue WA association conference, supported by FESA, was held in August 2005, bringing together representatives from volunteer groups round the state. It presented opportunities for interaction between the groups and for delegates to hear from industry representatives on new developments within the marine industry, research into emergency incidents at sea and new strategies for recruitment of volunteer members. A second conference is planned for August 2006.
TRAINING
More than 127 marine rescue volunteers enrolled with TAFE Colleges throughout Western Australia in 2005-2006 to participate in high level maritime training courses such as the Certificate III in Volunteer Marine Rescue Studies, Master 5 and Coxswain courses, and including marine search and rescue coordination, and senior first aid.

The Yachting Association of Western Australian also delivered training to 125 marine rescue volunteers for a variety of introductory courses, including Powerboat Instruction, Certificate IV Workplace Assessors, and Recreational Skippers Ticket Assessors.

Assessment of volunteer skills levels is ongoing and has ensured recognition of prior learning.

RESPONSE
Marine rescue volunteers committed 1,496 hours to 953 rescue incidents during 2005-2006.

NOTABLE INCIDENTS
KALBARRI – 3 SEPTEMBER 2005
A closed sandbar at the mouth of the Murchison River forced Kalbarri volunteer marine rescue crews to use jet skis and an inflatable dinghy in large swell to rescue a 15-year-old surfer swept out to sea. If a large search boat is required when the sandbar is closed, it has to be deployed from Port Gregory, 50km away.

KALBARRI – 5-15 OCTOBER 2005
Marine rescue volunteers in Kalbarri initiated a massive search for two men swept out of a dinghy at the mouth of the Murchison River. A 75-strong search team – including SES volunteers, police and community members – were involved in the search for the men, last seen only 100 metres off shore before a large wave swamped their boat. Ten aircraft, five commercial fishing craft and 14 amateur craft were also involved in the search. The body of one man was found. Partial remains of the other man were found six weeks after the incident. Two other men in the boat survived after they were washed onto the reef.

FITZGERALD RIVER NATIONAL PARK – 8 October 2005
Sea search and rescue volunteers from Hopetoun and Esperance joined SES volunteers, police, CALM staff and community members in a five-day search for a fisherman swept off rocks at Caves Point, 14km west of Hopetoun. A RAAF helicopter with infrared equipment and an aircraft from Esperance Air Service also joined the search. The man’s body was not found.

BALLA BALLA – 25 DECEMBER 2005
Two Port Walcott Volunteer Sea Search and Rescue volunteers sacrificed their Christmas Day celebrations to answer a call for assistance from two men on a seven-metre vessel in Balla Balla – a place known for its numerous mangrove-lined rivers. The vessel’s engines had seized after sucking in sand at low tide and the boat had begun drifting. The group’s rescue boat, Pilbara Seeker, was too large to enter the mangrove area so a local member offered his smaller boat, which was towed to Balla Balla – a round trip of 250km. The stranded men were safely returned to land but their vessel remained in the mangroves.

PORT WALCOTT – 8 January 2006
As Tropical Cyclone Clare bore down on the Pilbara coast, Port Walcott Volunteer Sea Search and Rescue volunteers answered a distress call from a broken down vessel 65km off shore. The search and rescue attempt commenced in fading light at 5pm and efforts to keep on bearing were hampered by strong squalls. Strong winds also impeded communication on the return leg to shore with the rescued vessel in tow. Increasingly rough conditions prevented the mission from making a direct line toward their destination at Point Samson. The rescue team eventually arrived at the marina about 2am. The next day the eye of TC Clare was in the vicinity of the rescue area.
GEOGRAPHE BAY – 30 January 2006
Members of the Naturaliste Volunteer Sea Rescue group were involved in a large-scale sea, air and land search for a recreational fisherman who fell overboard from his aluminium boat. The search – which involved 10 vessels, a police helicopter and several four-wheel drive vehicles – ended when the man walked ashore after swimming more than 5km in rough seas.

MANDURAH – 4 February 2006
Two men were winched to safety by the emergency helicopter RAC1 after their small boat capsized more than 30km off the coast south of Dawesville. The two spent more than three hours clinging to the bow of the boat before they were taken by RAC1 to Peel Hospital. RAC1 was mobilised after one of the men was able to retrieve and activate an emergency beacon that had been trapped under the boat.

COWARAMUP BAY – 4 May 2006
Margaret River Sea Search and Rescue braved dark and rainy conditions to escort a sailing boat with a damaged rudder into Cowaramup Bay.
Road crash rescue

WHILE the Western Australia Police Service is the hazard management agency for road transport emergencies, the extrication of casualties of vehicle crashes is undertaken by emergency services supported by FESA.

Career and volunteer firefighters from the Fire and Rescue Service predominantly provide this service throughout the state. However, volunteers from State Emergency Service (SES) units and Volunteer Emergency Service units also undertake this often lifesaving task in areas where Fire and Rescue Services are unavailable.

PREVENTION

DRIVE SAFE
While FESA does not have direct responsibility for road crash prevention programs, it regularly supports road safety programs undertaken by the WA Police Service, Road Wise and other agencies. In Karratha in the lead up to Easter 2006, the Karratha State Emergency Service and Fire and Rescue Service volunteers joined the local Police, Road Wise, St John Ambulance and industry groups in promotion of a drive-safe program.

ROAD SAFETY FOR EMERGENCY VEHICLES
FESA, St John Ambulance and the WA Police have joined forces to create an important brochure to promote safety on the roads: Every Second Counts - Give Way to Emergency Vehicles. It was launched as part of a new awareness campaign in October 2005 to educate motorists to give way to emergency vehicles to help increase the chance of saving lives.

In Western Australia, every four minutes an emergency vehicle uses lights and sirens to mobilise as quickly as possible to the scene of an emergency.

The brochure makes it clear that it is an offence to impede an emergency vehicle. It also clarifies the action drivers should take when giving way to emergency vehicles, emphasising that drivers must stay within the boundaries of the law or face a traffic infringement fine.

PREPAREDNESS

EQUIPMENT MAINTENANCE
A coordinated preventative maintenance program commenced during 2005-2006 for all motorised hydraulic rescue equipment located at State Emergency Service units throughout the state. It is the first time a coordinated program has been in place. In the first 12 months, all equipment will be serviced and thereafter the program will adhere to manufacturers' specifications. Loan equipment is made available to units while their gear is at the FESA O'Connor Workshops.

ROAD CRASH RESCUE COMPETITIONS
Two teams representing emergency services in Western Australia were fielded in the 2005 Australasian Road Crash Competition in Hamilton Hill, New Zealand, in October 2005. Teams were required to work on new vehicles to ensure rescue equipment and techniques kept pace with technological advances in motor vehicle manufacture. The competition is arranged to demonstrate excellence in road crash rescue.

The Fire and Rescue Services team won the limited category (which limits the use of power tools) and gained second place overall in the competition. They then went onto the World Road Rescue Skills Challenge and scored ninth from 21 teams. A team of State Emergency Service volunteers from units across the state recorded 18th place in the Australasian contest and 15th in the world contest.
FESA has been selected to host the 2007 Annual Road Rescue Challenge and Conference on behalf of the Australasian Road Rescue Organisation Inc.

It is to be called Western Rescue 2007 and will have the theme: Road Safety – Are we prepared for the future? The event will bring together rescue practitioners and industry and road safety stakeholders from throughout Australia and New Zealand, and other international guests.

It is to be held at the Perth Convention and Exhibition Centre from 28 June to 1 July 2007 and will include a trade display and learning symposium for up to 300 delegates. FESA hosted a similar, highly successful event in 2001.

It is anticipated that up to 24 teams, each of six members, will participate in the competition.

RESPONSE
In 2005-2006, emergency services in Western Australia attended 500 road crashes and extricated, or released 347 victims.

NOTABLE INCIDENTS
HILLARYS – 1 SEPTEMBER 2005
An 18-year-old man with serious head injuries was extricated by career firefighters from a car that had been driven into a power pole on Marmion Avenue. The car's driver and two other passengers received minor to moderate injuries.

ESPERANCE – 29 SEPTEMBER 2005
The Esperance volunteer Fire and Rescue Service used the jaws of life to free the body of a man from a car which ran off the South Coast Highway.

COLLIE – 25 OCTOBER 2005
Firefighters cut the roof from a sedan to free two trapped women involved in an accident on Wellington Dam Road near Collie. Two women were flown to Royal Perth Hospital.

STIRLING – 1 JANUARY 2006
A woman was extricated from her vehicle after the car she was driving hit a utility on Karrinyup Road. She was transported to hospital. The occupants of the other vehicle received only minor injuries.

GUILDFORD – 13 FEBRUARY 2006
Firefighters cut free the body of a teenager killed when he drove into the path of a train. The 18-year-old male died instantly when he drove down the wrong way of a one-way street and across the railway tracks.

HILLMAN – 16 JUNE 2006
The jaws of life were used by firefighters to extricate a 35-year-old man in a car that had flipped on to its roof. The car had failed to take a corner, become airborne and landed on its roof, trapping the man inside. The man was taken to hospital where he died later from his injuries.
Urban search and rescue

(INCORPORATING CONFINED SPACE AND HEAVY RESCUE)

AS a combat authority, FESA has developed a capability to deal with the rescue of casualties trapped by buildings, landfall or slippage which collapse as a result of industrial accidents, explosions, natural disasters and terrorist activity.

Additional funding in the past three years has allowed significant advances to be made in the state's preparedness, response and recovery capabilities in relation to urban search and rescue.

Career personnel along with volunteers from State Emergency Service (SES) units, volunteer fire brigades and multi-skilled Volunteer Emergency Service (VES) units provide this service throughout the state.

PREPAREDNESS

INTERNATIONAL COOPERATION

A Memorandum of Understanding signed between FESA and Singapore Civil Defence Force in March 2005 resulted in an officer exchange program and specialist urban search and rescue (USAR) operator training during 2005-2006.

The arrangement has resulted in a number of cost-effective training opportunities for both agencies in the past year, including:

- exchange of two FESA station officers to Singapore during August 2005
- 10 FESA staff trained in Singapore as specialist Category 2 USAR operators in March 2006
- two specialist Task Force officers participated in Singapore's Disaster Assistance Relief training.

The relationship between FESA and the Singapore Civil Defence Force will be consolidated further through:

- continued mutual training and professional development exchange opportunities
- participation in internationally accredited specialist courses including USAR, hazardous materials and ship and tank farm firefighting
- exchange of information and ideas in regard to operational procedures, research and development, equipment and training simulations.

IMPROVED CAPABILITY

During 2005-2006 FESA implemented an enhanced confined space rescue capability across the state.

The program included upgraded equipment, improved skills among personnel and revised procedures. More than $200,000 was spent to enhance the safety and skills of rescuers, with $25,000 allocated to establishing eight confined space rescue specialist stations. Six of these are in country regions – Albany, Bunbury, Kalgoorlie, Geraldton, Karratha and Kununurra – and two in Perth, at Success and Joondalup.

New equipment included atmospheric monitors, telescopic tripods, harnesses and haulage systems, ventilators, generators and escape breathing apparatus packs.

Two training categories have been established:

- category 1 – hazard identification and initial response
- category 2 – technician trained to enter confined spaces and conduct rescues where safe to do so.

Endorsement of assessors and specialist training were conducted in both regional and metropolitan centres. Phase-one training, which covers atmospheric monitoring, the use of breathing apparatus and
associated ventilation equipment, was delivered to crews at the confined space rescue specialist stations, crews at fire stations where special equipment tenders are located and to urban search and rescue teams in the Perth metropolitan area. Phase two training – covering the techniques for vertical and horizontal retrieval – was due to be completed by mid 2006.

MAJOR EMERGENCY RESPONSE TEAMS
In order to better support communities and emergency responders in the event of a major emergency, FESA has established four major emergency teams that can be deployed quickly anywhere in the state.

While the existing initial response to emergencies remains unchanged, a major emergency team will be mobilised to complement current arrangements, to assist as required, or to manage complex events.

The membership of each team is based on Australasian Inter-agency Incident Management System (AIIMS) roles. The teams will train and respond together in the event of significant emergencies.

The personnel for each team have been sourced from across the organisation, predominantly from the existing on-call rosters already in place.

The formation and mobilisation of pre-determined teams will ensure:
- a response with the appropriate number of people
- team members have the necessary competencies
- timely response to relieve the first incident management team for longer duration events
- specialist competencies for complex emergencies outside the normal operations of the organisation.

Processes and procedures were tested during Exercise Western Explorer in June 2006 (see details below).

UPGRADED FACILITIES
The urban search and rescue Category 2 training site at the FESA Training Centre at Forrestfield was extensively upgraded during the year.

USAR DOGS
FESA has begun training dogs to find survivors in collapsed buildings. The addition of the dogs to FESA’s urban search and rescue team will speed up the rescue process. The decision for the addition came after an explosion in a Yokine apartment block in April 2005 left a 71-year-old with critical injuries.

The dogs will complement the team’s technical equipment, such as listening devices, search cameras and heat-seeking instruments. They will be used to locate trapped, unconscious people who would not normally be able to be found by listening devices.

A three-day Canine Structural Collapse Search Workshop at the Forrestfield Training Centre encouraged the participation of more handlers and dogs from the State Emergency Service in this specialist field. Key aims of the workshop were to introduce trainers and dogs to new techniques and ensure they met nationally and internationally recognised competency standards.

EXERCISE WESTERN EXPLORER – JUNE 2006
Exercise Western Explorer, an investigation and consequence management exercise conducted under a Council of Australian Governments agreement, took place in Perth from 1-22 June 2006.

The purpose of the exercise was to test and practise the national counter-terrorism arrangements outlined in the National Counter-Terrorism Plan and handbook. The program included six discussion exercises and a three-day field exercise staged at a new purpose built building collapse facility at the FESA Training Centre in Forrestfield.

The exercise involved Fire and Rescue Service and State Emergency Service USAR Category 1 trained operators, SES volunteer units, the FESA USAR Task Force and FESA’s Major Emergency Teams. They were required to operate alongside WA Police and other key stakeholders from Western Australia. In
addition, New South Wales Fire Brigade and Australian Defence Force USAR teams also joined the exercise.

EXERCISE PACKER – JULY 2005

Firefighters from Canning Vale, Maddington, Osborne Park, Welshpool and Belmont practised locating and rescuing trapped victims in an extended simulated breathing apparatus operation 50 metres inside the west end of the new Kenwick Tunnel rail tunnel, Western Australia’s longest at 835 metres.

Key learning was related to communications and logistics, especially in respect to the long distance over which rescuers had to carry casualties. With the simulated casualties weighing between 70kg and 90kg, the task of rapid extrication to a safe area was a demanding one.

All objectives were achieved in the allocated time. The exercise provided a valuable opportunity to enhance FESA’s operational pre-plan for the new tunnel and familiarise firefighters with the structure.

Observers from FESA, the Public Transport Authority, WA Police and St John Ambulance were also on-site to learn from the experience.

COCKBURN CEMENT RESCUE DRILL – AUGUST 2005

An explosion on the sixth level of a furnace tower involving two injured workers formed the basis of a Fire and Rescue Service drill at Cockburn Cement, Munster. Firefighters from Success and Perth worked with the company’s emergency response team to evaluate specific rescue and recovery procedures. The exercise also allowed the Fire and Rescue Service crews to review their own abilities and limitations when operating at heights and with different skills sets.

EXERCISE LEIGHTON – MAY 2006

The Leighton Battery historic tunnel system at Buckland Hill was the backdrop for a multi-agency exercise that tested the effectiveness of emergency services in a train tunnel crash scenario. The exercise prepared emergency services for any future incidents that may occur in the underground tunnel of Perth’s new rail system.

The exercise involved more than 60 personnel largely drawn from FESA’s Curtin region, as well as Fire and Rescue Service crews from Fremantle, Success, Murdoch and Belmont. A St John Ambulance crew, Police officers, representatives from the WA Chemical Centre and the Department of Environment also participated.

The old World War II tunnels put career firefighters to the test as they operated in a cramped, dark environment where access to the injured was difficult. Conditions were particularly demanding for firefighters carrying twin-cylinder breathing apparatus.

RESPONSE

NOTABLE INCIDENTS

There were no major incidents during 2005-2006.