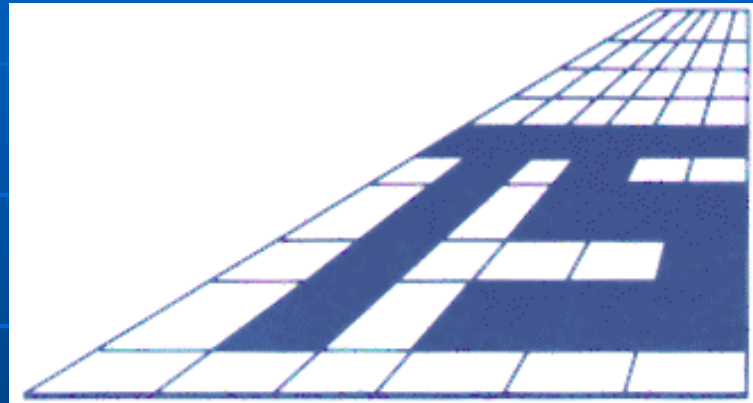


TERRA SEARCH

General Safety Induction



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Terra Search gratefully acknowledges MIM's permission to use information from their Operations Safety Manual.

How to use this presentation

- This presentation will run for about 20-40 min.
- Take your time and pay attention.
- If you do not understand certain information or you would like to have more information **please refer to the General Field Operations and Safety Manual or ask the Field Manager.**
- After the presentation you will complete a written test to demonstrate that you do understand all aspects of Terra Search General Field Operations and Safety Manual.



Contents

1. Introduction
2. Your Responsibilities
3. Field Operations
4. Field Camps
5. Safety Precautions in the Field
6. Vehicles
7. Field Survival Procedures
8. Communication, Search and Recovery System



1. Introduction

This power point presentation is intended to:

- Provide details of the Terra Search safety policy.
- Help employees identify safety hazards, and develop better safety awareness in potentially hazardous working conditions.
- Outline safe work practices for common exploration tasks and situations.
- Help avoid exposing yourself or your workmates to potentially dangerous situations.

Safety is your responsibility – not someone else's.

IF IN DOUBT ... ASK YOUR FIELD MANAGER



1. Introduction cont'd

Our clients are our livelihood

It is a Terra search policy to encourage feed back from our clients as to the standard of work completed and our worker's professionalism and efficiency at the job site.

It is also a Terra Search policy to measure all work activities against the controls of timing and budget. It is essential that ALL work be carried out in the best possible time to the highest possible standards. ALL Terra Search employees must strive to maintain these standards, but safety should never be sacrificed in the name of efficiency.

You only get back from a job what you put into it.



2. Your Responsibilities

All Terra Search personnel are responsible for supporting the Company safety objectives, and should:

- Encourage each employee to **be aware of Company safety policy**, by making sure that each employee has participated in this induction and read the Safety Manual and fully understands their contents
- Both encourage and enforce the safest work practice for each work task so as to **avoid or prevent accidents**.
- Investigate all accidents and incidents, and introduce changes to work practices to **avoid or minimise hazards**. If you become aware of a safer working procedure please notify your Field Manager
- The Field Manager is responsible for organising and coordinating safety awareness, for following up of accidents, incidents and safety hazards reports, and for subsequent actions to prevent accidents.
- Frequently check working habits to detect **unsafe 'short cuts' or dangerous methods**, such as:





2.1 Work Area Behaviour

Behaviour that may be acceptable outside work can be extremely dangerous and unacceptable in the workplace e.g. on hard or uneven ground, near sharp steel edges and around moving machinery.

Therefore:

- **Do not trip, fight or wrestle** another person;
- **Do not play** with fire, electricity, compressed air or water hoses;
- **Never throw things about** your workplace;
- **Do not distract anyone** who is concentrating on their job; and
- **Horseplay, skylarking and practical joking** will not be tolerated and shall be regarded as **grounds for dismissal**.





2.2 Drugs and Alcohol



Excessive alcohol consumption can cause dehydration and decreased work performance.

A person shall not enter or remain on any exploration lease, nor operate any equipment at that site, if that person is:

- Under the influence of a drug unless prescribed by a Medical Practitioner;
- Is knowingly suffering from any physical or mental condition, to the extent that the person is prevented from performing his duties in a safe manner; and
- Under the influence of alcohol.

Always drink in moderation around field camps and only after working hours. Excessive drinking, brawling and unruly behaviour in camps will not be tolerated and can lead to dismissal.





2.3 Housekeeping

Good housekeeping promotes safety and includes all the practices that keep the work area and equipment organised, clean and clear of rubbish.

- Return all tools to their correct location;
- Roll up hoses and extension cords after use;
- Clean up spillages as they occur;
- Place scrap materials in garbage bags or containers provided;
- If work area cannot be made completely safe, guard or barricade that area;
- Keep flammable liquids in closed containers in appropriate designated storage areas;
- Inform others of faulty equipment and label it clearly if it cannot immediately be repaired.





2.4 Environment & Heritage

Terra Search Environmental Policy

At **Terra Search** we are committed to the **highest standards of environmental performance**, community co-operation and principles of sustainable development.

This commitment will be achieved through a demonstrated understanding of environmental accountabilities, leadership in management, and the **effective implementation of Environmental Management Guidelines at our operations**.

We will ensure that we:

Fully **comply with all laws**, statutory regulations and standards with regards to the environment.

Identify, assess and responsibly **manage risks to the environment** and the communities in which we operate.

Consult with relevant stakeholders in the development of our **Environmental Management Guidelines**.

Train all employees and inform all contractors about the policy, so they **competently manage and are accountable for its implementation in their area of responsibility**.

Minimise the effect that activities have on the environment and the communities in which we work by diligent environmental planning, proper operating procedures and responsible rehabilitation programs.

Set targets for **continual improvement in environmental performance**, allocate appropriate resources to achieve those targets and routinely report and review our results.

Regularly review the policy and standards with regards to environmental issues and continuously strive to achieve the highest standard of environmental care.



2.4 Environment & Heritage cont'd

Individual Responsibilities:

- The environment should be disturbed as little as possible and care should be taken at all times.

Aboriginal Sites:

- If it is suspected that there may be Aboriginal Sacred Sites in or near the area being worked on, personnel must treat these areas with due respect and not desecrate them in any way.
- Nothing is to be removed from a sacred site.

Heritage Sites:

- Do not vandalise or take artifacts as souvenirs on old mining sites or from abandoned towns and buildings.



2.4 Environment & Heritage cont'd

Terrain:

- Prevent surface damage and soil erosion by **avoiding areas which are not designated roadways or tracks.**
- Limit travel on unmade tracks in wet weather to **avoid making wheel ruts** that encourage erosion.

Vegetation & Fauna:

- **Avoid unnecessary removal** of trees, shrubs and dead wood except when clearing a fire break around field camps.
- **Do not knowingly interfere** with or feed native animals.
- **Firearms and dogs (or other pets) are not to be taken** on to any exploration or mining leases.
- always ensure your **vehicle has been thoroughly washed and cleaned before relocation** from weed infestation areas to 'clean' areas



2.5 Code of Conduct

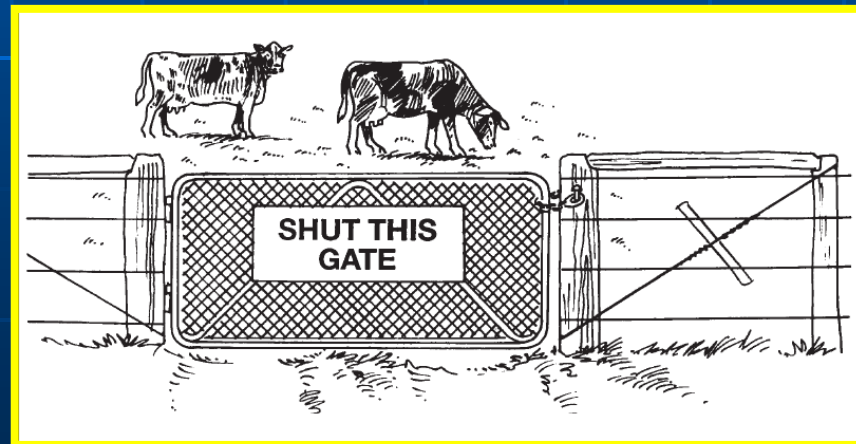
Pastoral Leases/ Other Landholdings

- Do not knowingly enter a property without **authorisation** (usually organised beforehand).
- It is good practice to make **contact** with the landowner/ property manager **before** entering landholding.
- Make yourself **aware** of landholders' current work program eg. mustering, calving, lambing, shearing, pasture improvements, areas of regeneration etc. and work around these activities.
- **Areas which should be avoided** or treated with care on any landholding include: troughs, tanks and bore drains; water pipelines; contour banks; fragile land areas; young tree plantings; ploughed or freshly sown land; and airstrips.
- Access routes to sites required for exploration should **be agreed upon with the landholder and adhered to**.
- Keep all camp sites **clean and tidy**.
- Use wooden rather than steel pegs for gridding work.



2.5 Code of Conduct cont'd Pastoral Leases/ Other Landholdings

- In wet conditions vehicle movement on unsealed roads should be minimised. Any damaged caused by **wet weather movements should be repaired ASAP.**
- Gates and fences should be left open or closed **as they are found.**
- Always **be polite and courteous** to all property personnel.
- Do not light any fires larger than those required for camp cooking.



3. Field Procedures

3.1 Hazard Identification & Risk Assessment

All Terra Search personnel are expected to contribute to the improvement of safe working practices and the elimination of hazards in the field. The following is a list of some, **but not all**, of the hazards that are most likely to create an accident or emergency situation:

- vehicle accidents, helicopter, exposure – heat stress/sunstroke and extreme cold, heavy equipment (e.g. drill rigs, bulldozers etc.), missing persons, bush fires and floods.

You are required for each activity to carry out a **Job Safety Assessment (JSA)**. Your field manager/supervisor will provide each crew with relevant JSAs and will show how to undertake such an assessment.

If you encounter hazards not mentioned on the JSA, there is room to add hazards and make suggestions to control the hazards. **Notify** your field manager of this, so adequate steps can be undertaken to improve your safety in the field.

JSAs need to be **signed every day** and handed back to the office by the end of the job.



3.2 Personal Protective Equipment

Provision of PPE

As the hierarchy of control dictates, PPE shall be used where no other means of control are practicable. It is recognised however, that a combination of controls may be the most appropriate method of controlling a hazard.

Therefore, Terra Search provides an adequate supply of PPE which complies to relevant standards for each job, this can include:

- High visibility shirts, hard hats, safety glasses (goggles or face shields), hearing protection, respiratory protection, gloves.

Standard PPE which needs to be worn at any time when travelling from or to a job.

- Suitable clean and respectable looking clothing – recommended is long sleeve shirts and long pants
- Safety Footwear

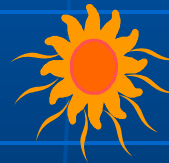
(Trousers and boots need to be supplied by the employee.)



3.2 Personal Protective Equipment cont'd

Standard PPE out in the field

- Wide brimmed **Hat**,
- Tinted Safety **Glasses** with UV protection,
- Suitable **Clothing**: long sleeved high visibility shirt and long pants,
- **Safety Footwear**,
- **Skin Protection**: sunblock (Factor 30+) is recommended for exposed skin and zinc cream for ears, nose and lips, make sure your shirt has a collar to protect your neck.



Other Safety Equipment

- Plenty of **Water**,
- **Navigation systems**, such as GPS with correct coordinates and maps with suitable scale.

All field personnel need to check their PPE before the commencement of field activities and are responsible to **inspect and maintain** it regularly.



3.3 Geological and Geophysical Surveys



3.3 Geological and Geophysical Surveys

Hazards:

- Vehicle accidents, sharp objects, burns while cooking, and chips of steel or stone when hammering rocks; sunburn and heat exhaustion.

Safety Measures:

- **Careful** conduct of vehicles (see chapter 6).
- Working in **shade** whenever possible.
- Drinking ample **water**.
- Prior to assisting with geophysical surveys operated by contract companies, there must be an **induction** into their Standard Operational Procedure for that survey by the site senior person for the company.
- **PPE** (eg. suitable clothing, boots, safety glasses, broad-rimmed hats, gloves, dust masks)



3.4 Trenching and pitting; Line Clearing with Heavy Machinery



3.4 Trenching and pitting; Line Clearing with Heavy Machinery

Risks involving bulldozer or backhoe/excavator operations:

- being struck while the machine is travelling
- flying timber
- possible collapse of pit or trench walls

Safety Measures:

- Stay at least two tree lengths away from machine while it is travelling and beyond its reach while digging is in progress.
- Do not enter any trench or pit in unstable ground which is more than one metre deep (for exemptions see safety manual).
- Mark open trenches and pits at all corners with bright flagging tape, and backfill trenches and pits after sampling, so people, vehicles or stock will not accidentally fall in.
- PPE (especially hard hats and protective eyewear)



3.5 Drilling



3.5 Drilling

Drilling hazards:

- materials dropping from the drill mast or are thrown from rotating machinery, high pressure air hoses, lifting of heavy weights, slipping and tripping, excessive noise levels, and the danger of heat exhaustion.

Safety measures:

- Do not stand close to drilling rig for longer than **absolutely necessary** to snatch a sample.
- Arrange with drillers so that core trays and mounds of drill cuttings are placed at least **5m** from rig.
- To lift heavy loads **get help** from field assistant or drilling crew.
- Carry out long term duties (eg. core logging, bulk sample splitting) in **shade**
- **Flag** sumps and upon completion of the drilling program, make sure they are **backfilled**
- wear **PPE** (ear plugs, hard hat, dust mask, safety glasses, steel capped boots, suitable clothing)



3.6 Handling Drill Core

Hazards:

- lifting heavy weights, slipping and tripping, sharps and rotating machinery, excess noise levels, acid and sun burns

Safety measures:

- Carrying core trays is a **two-man-job**. Metal lids should stay on trays during all handling operations, except core logging and sawing.
- Carry out core logging in **shade**, wear long-sleeve clothing, wide-brimmed hat and sun screen.
- For **core sawing**, keep work area tidy, ensure saw is working properly, check water supply, only cut short pieces of core (20cm/8inches). Only **trained technicians** can undertake core sawing. Wear face shield, ear muffs, apron and safety footwear. Any person **within 4m** needs to wear ear protection.
- For testing drill core with **acid and stains** training is required. Wear **safety glasses, gloves and plastic apron**. Wash core with ample water before returning it into tray. Make sure there is bucket of water at test site. Only use diluted HCL (10%) for carbonate testing.





3.7 Injury or Illness

Minor Injuries:

- In case of minor injury, where patient is conscious and the associated pain is tolerable, **treatment can be provided from first aid kit** and the patient allowed some time off work or on light duties. In doubt, call the RFDS (Royal Flying Doctors Service) or field manager and get advice before starting any treatment locally.
- First aid kits are stored **behind the seat of company vehicles**. A large RFDS medical kit is usually available at larger base camps and field depots.
- **Report accident/incident** to your supervisor/ field manager ASAP, even if it was only a minor injury or shock due to a near miss and fill out provided incident report.



3.7 Injury or Illness cont'd



Serious Injuries:

- In case of serious injury, where eg. severe pain, major bleeding, fracture(s) or unconsciousness is involved, **senior employees or a qualified first aid person at or near the site of the injury should arrange for rapid medical attention** (call RFDS and take instructions), and should remain with the injured employee until this attention is provided.
- The senior employee should then make subsequent arrangements for transportation of the injured employee by vehicle to hospital, aid centre, RFDS aircraft or an ambulance to collect the injured employee or the employee to be taken to a hospital or medical centre.
- **Report accident/incident** to your supervisor/ field manager ASAP and fill out provided incident report.
- For snake bite treatment refer to Chapter 11, page 72 of your safety manual. In Chapter 11 you will also find other first aid treatments.

4. Field Camps



4. Field Camps cont'd



For all camps, the site and layout should be chosen to provide acceptable standards of safety and hygiene, and to minimise risk from fire or flood.

Safety standards:

- Selecting reasonably **level** area with few shady trees (not of the branch shedding type though).
- Camp should be **upwind** from access track to avoid dust from vehicles and be well ventilated.
- Sandy to gravel like ground is preferable to clay soils, which become dusty.
- In areas with no permanent water a **water tank with 10 litre/person/day** capacity is a minimum requirement.
- Electrical cables and wires should be kept clear of ground. Joins should be made **safe and waterproof**. Connections should be kept **simple**. Use **heavy duty** cable from generator to any distribution board to minimise voltage drop.



4. Field Camps cont'd

Hygiene standards:

- The camp should be easy **walking distance** from a water supply, and **upstream** from any pollutants.
- For **short term camps** and only a few people, food scraps can be buried or burned and all liquids allowed to **drain away naturally**. Empty cans and bottles should be placed in a garbage bag for disposal at the nearest town.
- For **larger and more permanent camps**, waste water from cooking, dish washing and showering should be directed by drains to a **sullage pit**. Enclosed showers with hot water should be provided. **All rubbish should go to a deep pit, and be covered with dirt, daily or placed in heavy duty garbage bags.** Human waste will require **permanent latrines**, or **chemical toilets**. The planning and logistics of large camps are usually carried out by the field manager.
- **Personal cleanliness** is necessary to avoid illness; in addition to hot showers, there should be hand washing facilities in the cooking and latrine areas and facilities for washing clothing.



4. Field Camps cont'd

Minimising risk from fire or flood:

- Don't camp in creeks or river beds!
- Camp site should be **higher** than maximum flood level, as shown by the flood debris in trees.
- Avoidance of fire damage may require a **cleared firebreak** around the camp and campfire area.
- **Fuel stores** should also have firebreak protection.



4. Field Camps cont'd

Safe practice in regards to Generators and Gas bottles:

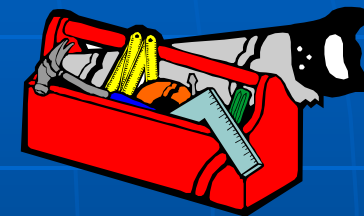
- **One person** in each camp should be **responsible** for the generator and associated electrical wiring and equipment. This person should manage the installation of all electrical equipment, and **keep a record** of all servicing and repairs.
- All wiring and equipment should be **maintained and checked regularly**. Wiring, appliances and fuses should be chosen to sit the output of the generator.
- The generator should be **refuelled, inspected and serviced at least once a day**, to obtain a long working life. When permanently used over a longer period include **oil change once a week**.
- The generator should be **switched off each night**; diesel generators should not be allowed to run dry of fuel, as that they cannot be instantly restarted.
- **Gas bottles and appliances should be checked regularly for leaks**. Bottles should be stored upright and kept in cool, airy position.
- Always store a good **torch** in **easy to reach** area of camp.



5. Safety Precautions in the Field

5.1 Hand Tools

- Use only tools which are in **good condition** and only for the purpose for which they were designed.
- Use tools **correctly**.
- Keep tools in **safe** place, especially sharp ones.
- Tools which develop defects whilst in use (eg. loose, cracked, splintered handles etc.), shall be **removed from service, tagged accordingly and not used again until repaired**.
- The handle of every wrench is designed to be long enough for the maximum allowable safe pressure – do not use extensions on handles – select a more adequate tool for the job.
- Always wear boots (**steel cap**) and safety glasses when chopping wood with an axe.



5.2 Portable Power Tools

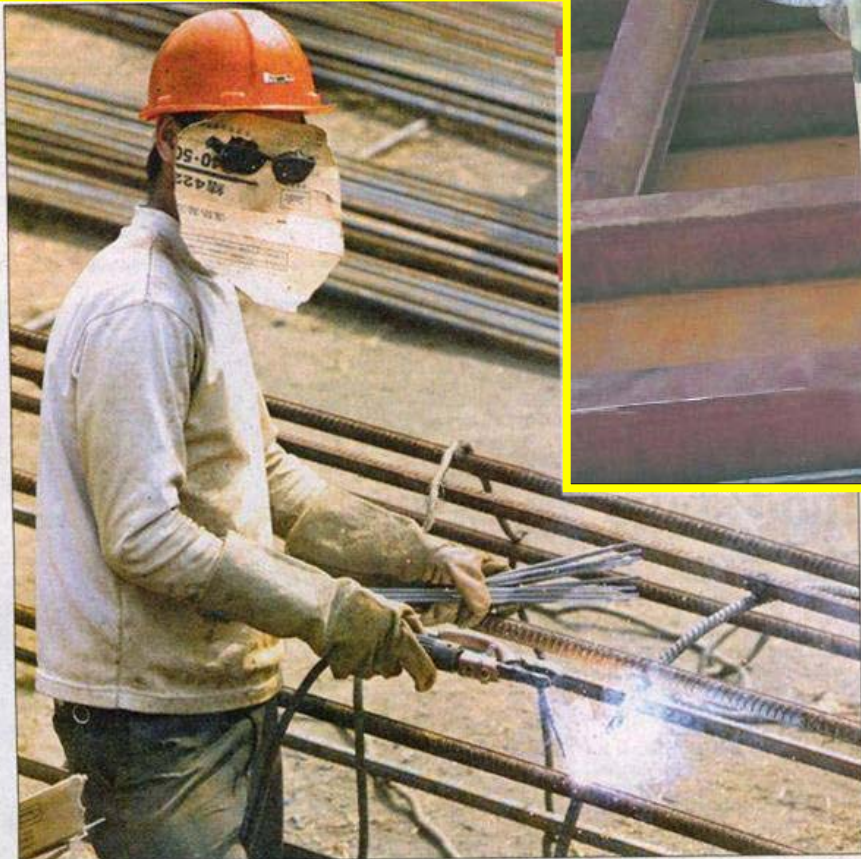


- Always **disconnect** the source of power before changing accessories.
- **Do not** hang cords or hoses over nails, bolts or sharp edges and keep them away from oil, hot surfaces, chemicals and water.
- Be aware of **trip hazards** caused by power cords.
- Do not leave the tool in an **overhead position** where there is a chance that the cord or hose, if pulled, will cause the tool to fall.
- **Chainsaws** are **not** to be used by **untrained** personnel. Training can be organised by Terra Search if required.
- Always wear goggles or full face shields when using grinders, etc.

Not like...

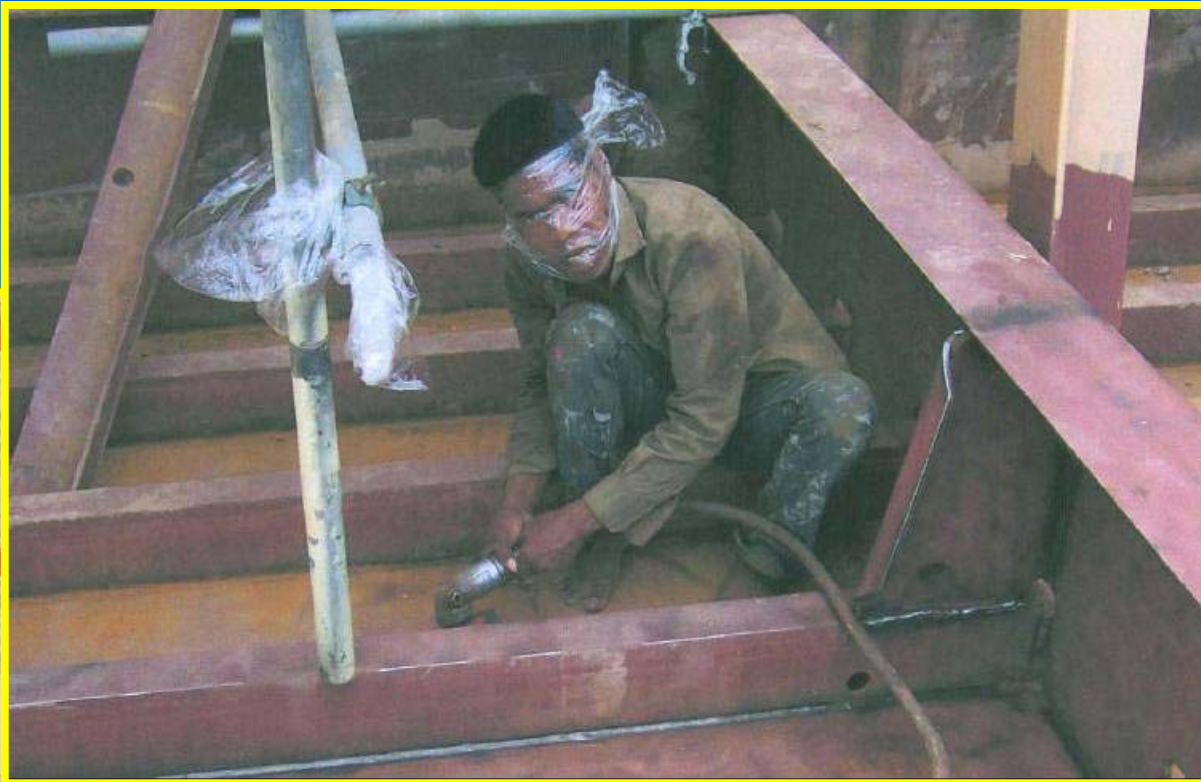


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A worker welds at a construction site in Nanjing, the capital of East China's Jiangsu Province.

FILE PHOTO



5.3 Fire Fighting

IN CASE OF FIRE, USE COMMON SENSE!!



Fire Hazards:

- Burning cigarette butts, drums of fuel, refuelling areas, dry scrub and grassland, rubbish disposal pit areas and the possibility of fire in cooking areas.

Safety Measures:

- Fire breaks around camps and ready access to water.
- Fire extinguishers should be stored near potential fire areas. There are two types:
 - water type (suitable for wood and paper fires)
 - dry chemical type (suitable for petrol, oil and electrical fires)

Dry chemical type extinguishers are carried in vehicles. Check and maintain pressure gauges regularly.

- Make sure that all camp personnel know where the extinguishers, buckets and hoses are kept
- Remove fire hazards as far as possible.



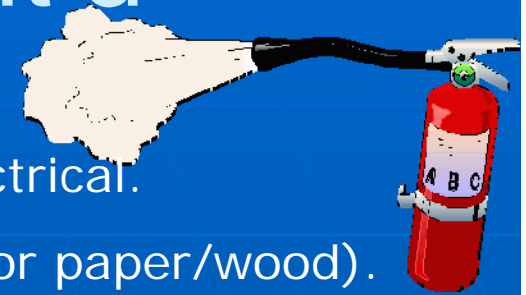
5.3 Fire Fighting cont'd

Fire fighting procedures:

- **Identify** the type of fire – paper/wood, liquid, or electrical.
- **Select** the correct extinguisher or bucket of water (for paper/wood).
- **Check** the extinguisher pressure gauge for its contents.
- **Pull** the locking pin on the extinguisher, and **check** that it operates properly before you go near the fire.
- **Go to the fire** and use the extinguisher or water to put it out, in standing **upwind** and **directing spray on base of flames**.

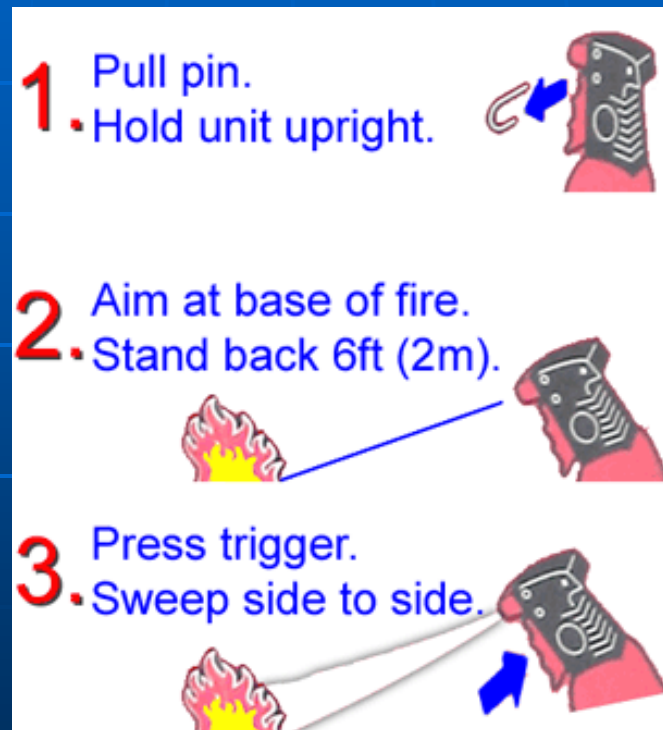
After the fire is extinguished:

- **Check** the fire area several times during the next hour to make sure it does **not restart**.
- **Report** all fires to your supervisor/field manager and fill out incident report.
- Do not rehang the extinguisher; **replace** the used extinguisher with one that is fully charged, or arrange for it to be recharged.



5.3 Fire Fighting cont'd

All fire extinguishers will have **simple instructions** clearly printed on the side of the canister, such as these:



Read **Section 4.7** in the Safety Manual to learn about the **Safety Procedures** in case you are caught in a **Bush Fire**.

5.4 Lifting and Shifting



Back injuries are easily caused but hard to mend!

- Before lift or carry an individual load it needs to be judged, considering factors such as access, shape of the load, total weight, and the distance to be carried.
- First size up the load, and the clear the path to be travelled.
- When lifting **BEND YOUR KNEES BUT NOT YOUR BACK.**
- Ensure two people lift heavy objects, such as vehicle tyres, or standing 200 litre drums upright.
- Common sense and not a 'bull-at-a-gate' attitude should be practised.
- Ask for help if the load is too heavy, not like this guy...

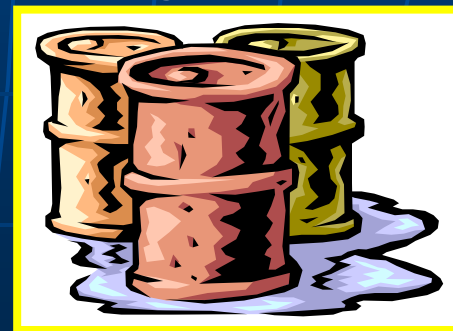




5.5 Fuel Storage and Handling

- All fuel should be stored at a **safe distance** from the camp site in an **easily accessible** area.
- Fuel drums should be **labelled** on their sides by types, eg. petrol, diesel.
- Drums **being used** should be **stored on an angle** with bungs on each side to avoid water pollution.
- A fire **extinguisher** should be situated **near the fuel drums** and a **fire break** cleared around the drum storage area.
- **No** drums of fuel are to be carried **on a vehicle whilst the pump is still attached to the drum**.
- Drums should be **secured properly** when being transported on a vehicle.

**DO NOT SMOKE ANYWHERE NEAR
THE FUEL STORAGE AREA!!**



6. Vehicles

More **fatalities** occur with motor vehicles than with any other task or equipment, and **careless use of vehicles** produces more accidents and injuries than any other cause.



DON'T DRIVE AS IF YOU OWN THE ROAD...

... DRIVE AS IF YOU OWN THE CAR!!!



6.1 General Rules

- Vehicles should be driven only by those with a **valid license** for that type of vehicle
- Vehicles should always be driven **sensibly**, with **consideration** to the comfort and safety of others.
- Drivers must **obey all traffic and parking regulations**. Fines for breaking these regulations are **paid by the driver** as well.
- **Alcohol or drugs must not be used** before or during driving.
- All occupants must wear **properly fastened seatbelts** while a vehicle is moving. No one should be riding on the back of a utility.
- Vehicles must be **loaded safely**: overloading is prohibited.
- MP3 players, mobile phones or other electronic devices should not be operated **while** driving.
- **Inspect** car after off-road driving, before each field day and weekly according to Terra Search standards.



6.2 Mandatory Vehicle Induction

All employees will have to undergo the Vehicle Induction which will cover in-depth:

- **safe driving methods** on and off road,
- **vehicle maintenance** (daily and weekly, pre job),
- **tyre changing and repair,**
- **safe recovery methods** including jacking, winching, and snatch strapping.



7. Field Survival Procedures

These procedures apply if an **employee is lost (on foot or in a vehicle) or is stranded in an isolated area**, i.e. has not been collected by the expected transport at the expected time.

To be prepared for such an emergency always take suitable **communication** devices, plenty of **water** and a **first aid kit** as a minimum survival kit on every field trip.

- always take a **charged satellite phone** with you, when going into areas without mobile phone reception
- make sure the **water tank** on your vehicle is always **full** before you leave
- have a small first aid kit for your backpack in addition to the one in the car
- if you go **remote take repair and recovery tools**
- other handy things to be on the safe side: emergency rations, compass, pocket knife, matches or lighter



7. Field Survival Procedures

General rules:

- To **avoid** getting into such a situation, do not solely rely on GPS or compass instruments when in the field. If traversing away from established tracks leave **a flagging trail** and take **note of significant features**.
- If you do find yourself in such a situation, **don't panic**. **Contact the field manager** or other relevant persons. Sit down in the shade and consider all the circumstances.



- When others know where you are, and will search for you after a set period, **the best action you can take is to remain where you are**.
- Direct your attention for this limited period of isolation to managing the situation as **efficiently** as possible – particularly to your **water** and **shelter** requirements.



7.1 Water

When dealing with limited water supplies for an unknown length of time, survival depends largely on management of water supplies, which involves three factors:

1. **Reduction in Temperature** (outside and body):

- Rest in **deep shade**, especially through hottest part of day, about 1m elevated above ground, where temperature is coolest. Leave your clothes on - your sweat evaporates slowly and gives maximum cooling when body is covered. Do not park your vehicle in shade – drive into clearing where it can be easily seen during aerial search.

2. **Reduction of physical activity:**

- **Resting quietly** in shade uses least water in form of sweat. Remember to ration your sweat, not your water. You still need to drink several litres of water per day even when completely inactive.



7.1 Water

3. Manage amount of water available.

- If you have vehicle with reasonable amount of water in tank, **stay put**. You can survive with a full tank for at least 3 days in the hottest weather, much longer when it is cooler. Only walk or drive to water source if you have little or no water, and are certain to get there.

In the manual you will find handy advice and tips, such as the Desert Water Table or how to retrieve your own water.



7.2 Shelter

- Best shelter is a **shady tree**, which needs no effort or sweat to prepare.
- In areas with few trees, it may be possible to improvise some deeper shade by leaning branches against a large bush. Be aware that the amount of effort to increase the naturally available shade should be **balanced** against the improvement to be achieved.
- If there is a tent fly or swag cover in the Toyota, this might be used to rig a rough shelter – make sure this is oriented so as to catch the cooling winds.
- In cooler areas try to build a **wind break** and a **fire** for warmth.



Figure 6-4. Field-expedited shelter to ward the weather.



7.3 Leaving the Vehicle

Walking away from the site should be the **last option**. Only do so if after some rest and a lot of consideration and you can't get in contact with Terra Search or client, and you still think this is absolutely essential for recovery from your situation.

Plan thoroughly before leaving the vehicle:

- Sit down in shade and **mark planned route on a map, or draw a sketch** if you don't have a map. Write length and bearing of each of sectors of your walk on map or sketch, and also total length to be walked. Mark on check points every few kilometres, at which you will compare your position with prominent features like hilltops or creeks.
- **Decide** to walk immediately or in cool of late afternoon (you use less water when resting during hot part of day). **Before you leave, write note stating what you intend to do, and leave it with copy of route map in an obvious place.**
- walk at steady pace and take **regular rests in shade**. Check you follow planned route at each stop. Leave flagging tape along your route, if possible.



7. Field Survival Procedures Cont'd

Other handy Survival Procedures:

Signalling:

How to attract attention with signals - this can be with a mirror, fire & smoke, noise and with ground signals.

Generally **3 repeated signals are a sign of distress.**

30/30 rule :

Electrical Storms – take safety precautions when thunder is heard within **30 seconds of a lightning flash and wait 30 minutes after the last thunder** is heard to resume your activity.

Precautions – if possible stay inside vehicle (hard top), but do not touch any metal sections & keep clear of windows; if shelter is not available, make yourself a small target, avoid being highest object, but do not lie down; stay away from anything metallic.

You will find **more details and further Survival Information** in Chapter 4 in your Safety Manual.



8 Communication, Search and Recovery System

8.1 Communication

Terra Search uses Iridium Satellite phones and UHF radios for communication in areas where land line or mobile phone is not feasible:

Satellite phones:

- Most commonly used to contact field base or clients. To use:
 - Turn the phone on by pressing the button with the red circle on it (Bottom left of keypad)
 - Enter pin code 1111. Then press Ok.
 - Hold the "0" key for approx 3 seconds, till the "+" appears.
 - landline: dial +61(Australia), 7 (for QLD) or 8 (for WA), phone #, then "OK"
 - mobile: dial +61, then drop '0' of mobile no (eg. for field manger's mobile: 428882339), then "OK"

For other functions check instructions inside phone case.



8.1 Communication cont'd

UHF (ultra high frequency) radios:

- These radios are for short distance communication, including vehicle to vehicle and vehicle to hand-held radio.
- The maximum distance covered is up to 20km depending on the layout of land and the type of radio.
- There are 40 different channels to choose from. To communicate from one radio to the other, the radios need to be switched on and be on the same channel.
- Truckies use channel 40. When travelling to or from a job this is a handy channel to find out about traffic, especially on the one way highways out west or at one way river crossings etc.
- To actually speak, hold down the button on the site and release once you finished speaking to hear the other operator.
- For further questions about the use of UHF radios ask your field manager.



8.2 Daily Reporting Requirements

- Field crew have to sched in daily to the Terra Search office when they return to camp
- Topics to report can be location of camp and/or work (maps will be provided and one copy kept in the office), the well being of crew members, any accidents, incidents or near-misses, work procedures etc.
- The field manager will advise you of what sched procedure is required on each particular job.
- Contact and emergency details are in the safety manual and will be given to you in person by the field manager.

DO NOT FORGET – A SEARCH WILL START IF NO CONTACT IS MADE BY THE APPOINTED TIME.

FAILURE TO REMEMBER AND FOLLOW PROCEDURES WILL RESULT IN APPROPRIATE DISCIPLINARY ACTION



Example of Emergency Number Handout

MT ISA AREA

EMERGENCY SERVICES CONTACT NUMBERS

Emergency Contacts	000
Police - Mt Isa (7 Isa St, Mt Isa)	07 4743 2222
Police - Cloncurry (35 Scarr St, Cloncurry)	07 4742 1200
Police - Dalrymple	07 4748 4866
SES - 71 Camooweal St, Mt Isa	07 4743 2601
Hospital - Cloncurry (King St, Cloncurry)	07 4742 1300
Hospital - Mt Isa (30 Camooweal St, Mt Isa) ✓	07 4744 4444
Hospital - Julia Creek (Bourke St, Julia Creek)	07 4746 7177
Fire / Bush Fire Service - Mt Isa	07 4743 2233
Fire / Bush Fire Services - Cloncurry (Scarr St)	07 4742 1400
Ambulance - Mt Isa	07 4743 2211
Ambulance - Cloncurry	07 4742 1100
Rural Bush Fire Brigade - Laurie Colgrove	07 4742 2358
RFDS Base - Mt Isa (VJN)	07 4743 2800
24hr Medical Line - Mt Isa	07 4743 2802
RFDS Base - Cairns (VJN)	07 4053 1952
24hr Medical Line - Cairns	07 4753 5419
RFDS Base - Charleville (VJJ)	07 4754 1233
24hr Medical Line - Charleville	07 4754 1443
RFDS Base - Alice Springs (VJD)	08 8952 1033

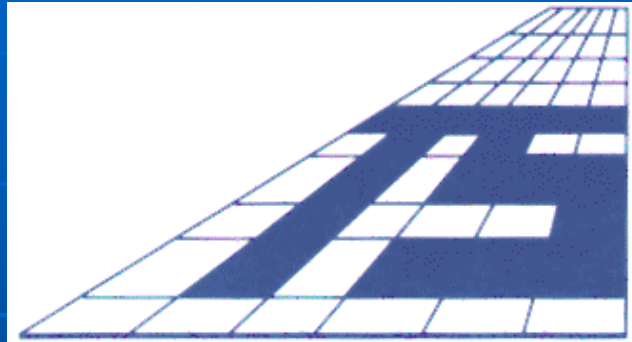


8.3 Recovery Operations

- Assistance will be provided for any employee who is lost, stranded or requires medical attention, or is in a vehicle which is bogged, broken down or accidentally damaged.
- Contact the Terra Search office or nearest vehicle/crew, describe your location and the problem, and act on the advice received. In most cases a helicopter or vehicle can be at your site in a few hours.
- If your communication systems do not work don't panic – boil the billy and consider your options. Staying with the vehicle is usually your best choice.
- For a motor vehicle accident, the following actions are recommended before other help is obtained.
 1. Make the scene safe, see who is injured and assist them as best as you can.
 2. Call for help with satellite phone or radios.
 3. If a helicopter is expected try to find suitable landing area (flat and wide) nearby and mark it with a large 'H' with whatever visible material you can find.



End of Presentation



Terra Search Pty Ltd
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Specialists in Mineral Exploration,
Geology and Computing