8.01. **General:** The importance of thorough training for all personnel employed on SAR missions cannot be over-emphasised. Failure of a single link in the often complex chain of action required in SAR missions can compromise the success of the operation, resulting in loss of lives that might otherwise have been saved. The purpose of training is to meet SAR system objectives by developing SAR specialists. Since considerable experience and judgement are needed to handle SAR situations, necessary skills require significant time to master. Training can be expensive but contributes to operational effectiveness. Quality of performance will match the quality of training.

8.02. **Professionalism:** Consistency in training and sharing of information relating to search and rescue is promoted through the National Amendment and Training sub-committee and the National SAR Council. Standardisation to the prosecution of SAR Operations is encouraged through these forums.

8.03. Efforts to ensure professionalism extend to career development for individuals who are assigned to undertake SAR duties. The aim is to ensure SAR officers are competent. In additions, agencies should consider making appointments of sufficient length to develop expertise and take advantage of SAR experience in subsequent appointment of officers.

8.04. **Who to train:** All personnel involved in SAR Operation need to undertake SAR-specific training. Specialist team training may also be required. Where there is a requirement for multi-agency response, teams should be exercised in such a manner that each team and each team member understands the role that they play in support of the incident.

8.05. **Requirement for training:** Training is critical to performance and safety. The SAR system should save those in distress when it can, and also use training to reduce risks to its own valuable personnel and facilities. Training personnel in making sound risk assessment will help to ensure that these trained professionals and valuable facilities remain available for future operations.

8.06. Search and rescue organisations are responsible for the establishment of training programs for SAR personnel to reach and maintain competence appropriate to their role.

8.07. Training of SAR personnel should focus on both the practical and theoretical application of SAR and can include the following:
   a. Study of SAR procedures, techniques and equipment through lectures, demonstrations, films, SAR manuals and journals;
   b. Assisting in or observing actual operations; and
   c. Exercises in which personnel are trained to coordinate individual procedures and techniques, or operate specialised equipment, in an actual or simulated environment.

8.08. **Public Safety Training Package:** The Public Safety Training Package has been developed through extensive consultation involving all Australian SAR authorities. The qualifications contained within the package are consistent with Australian Qualifications Framework (AQF) guidelines and are endorsed by the Australian National Training Authority (ANTA).

8.09. The Public Safety Training Package provides units of competence and qualifications that identify core competency standards for personnel who are involved in SAR activities. Units of competence have been packaged and aligned to a specific qualification within the AQF to establish the qualification level and title.
8.10 **AMSA Registered Training Organisation**: The Australian Maritime Safety Authority is a Registered Training Organisation (RTO), which includes search and rescue training.

8.11. AMSA provides specialist aviation and maritime search and rescue training to officers primarily in Australia's Joint Rescue Coordination Centre (JRCC). In addition, AMSA provides SAR training to Australian and International Defence Forces, Police personnel, and search and rescue staff in neighbouring countries.

8.12. AMSA is the RTO and provides support for the Advanced Diploma of Public Safety (Police Search and Rescue Management) course held annually at the Australian Federal Police College, Canberra.

8.13. Directing staff of the National Police Search and Rescue Managers Course, in addition to instructors from AMSA, are drawn from Australian police organisations. These officers are subject matter experts in land and marine search and rescue and are qualified in workplace training and assessment.

8.14. **State/Territory SAR Authority Training**: In addition to participating in the National Police SAR Managers training program the State/Territory Police organisations in Australia conduct search and rescue specific training with personnel involved, or who may become involved, in SAR operations at a local level.

8.15. This training involves principally land and coastal search and rescue operations employing their own personnel and personnel from other State/Territory organisations having a role in local search and rescue missions.

8.16. Formal training in the Diploma of Public Safety (Police Search and Rescue Coordination) is conducted by a number of registered training organisations associated with the Australian Police Services.

8.17. Ongoing training and the upkeep of SAR skills has been identified as a problem affecting all SAR Authorities. Each authority is responsible for maintaining a program that ensures SAR skills and knowledge are kept at a high level. It has been identified that merely coordinating SAR incidents does not constitute skills maintenance as coordinators slowly become complaisant and take short cuts. Good results may be often due to luck rather than good planning. Various Coroners’ Courts have identified many SAR incidents that have failed due to poor or non existent planning. Regular training exercises and practical tests that encourage the use of correct methods should be undertaken on an annual or biannual basis.

8.18. **Search and Rescue Exercises**: Each State/Territory Police Service should periodically take part in coordinated search and rescue exercises (SAREX). These SAREX’s should be designed to exercise the SAR system, in whole or part, and test such things as operational plans, communication procedures and facilities, individual staff performance, SAR unit performance and inter-organisation and/or international operations.

8.19. It is equally important that personnel have a good knowledge of the duties and procedures of other units and person who may be involved in a SAR operation, particularly those with whom they will have direct contact. It is especially important that SMC’s be aware of the time, effort, and risk involved when requests are made to other units or organisations.

8.20. Liaison visits between personnel likely to become involved together in SAR operations are encouraged. SMC’s and SAR personnel should visit other SAR units or RCC’s to become familiar with their facilities and capabilities and when possible take part in training exercises.

8.21. The regular conduct of joint SAREX’s between SAR Authorities should form a part of any training program.
8.22. Emergency Management Australia (EMA) has developed a handbook, *Managing Exercises* that should be used as a guide and to assist SAR personnel designing and conducting search and rescue exercises.

8.23. **Training of SAR Units**: As the responsibility for land search, as defined in the National SAR Plan, is that of the State/Territory Police organisations, with assistance from members of the State and Territory Emergency Services, land SAR training is generally conducted by those organisations.

8.24. Other SAR authorities that may become involved in a land SAR incident should ensure that their members are familiar with police arrangements for alerting and dispatching of rescue units.

8.25. **First Aid Training**: All personnel involved in SAR need to be trained in basic first aid. Each State/Territory has first aid training capabilities, via their State/Territory Ambulance Services, St John’s Ambulance or private providers. While all personnel should have a basic first aid knowledge, at least one member of each search team should be qualified to a higher level of training, Senior First Aid or First Response First Aid. Regular training needs to be carried out to instil confidence in the delivery of first aid in remote situations.

8.26. **Dropmaster and Dispatchers**: The dispatch of survival stores and equipment from an aircraft to survivors on land or over water is an exacting task, which, if not performed well, can nullify or seriously delay the rescue effort and may endanger the aircraft.

8.27. Supply dropping operations by civil aircraft should only be carried out by personnel trained in the preparation and delivery of droppable equipment in accordance with CASA regulations.

8.28. Joint exercises involving all authorities who organise or participate in land rescue should be arranged on a periodic basis.

8.29. **Air Observer Training**: Major SAR operations require a considerable number of observers who may be drawn from various organisations. JRCC has published a comprehensive handbook for Observers that is available to all SAR Authorities from the SAR Resources and Training section of AMSA. Observer leaders, observer briefing check lists, aircraft observer instructions and observers on ships are discussed in detail at Chapter 5.

8.30. **Team Skills**: Whilst the ability to ‘see’ in the bush is probably the most important skill for a member of a search team, there are a number of other skills in which the searcher must be trained if they are to operate successfully. In addition, individuals must train together to increase their effectiveness as a team. The Team Leader is responsible for continuous training of the team to ensure that they will be capable of searching effectively. Much of this training only comes with regular practise and cannot be gained in one annual search exercise.

8.31. **Individual Skills**: Each search team member must receive training in:
   a. map reading and navigation;
   b. radio operating procedures;
   c. basic first aid;
   d. field craft;
   e. observation; and
   f. search techniques.

8.32. **Map Reading & Navigation**: Training is to be in accordance with the established map reading plans for each State/Territory. The standard map datum system to be used on all SAR incidents is World Geodetic Datum 1984 (WGD84) in line with other countries. It is the reference coordinate system used by the Global Positioning System (GPS). WGD standardises the Earth as a spheroid with its accompanying coordinate framework. The Australian Geodetic Datum
(AGD), both the 1966 and 1984 versions, has been replaced by Geocentric Datum of Australia (GDA94). Therefore, for all practical purposes, the GDA is fully compatible with WGS84 and ITRF92 in terms of spheroid and datum. The National Mapping Council adopted the use of GDA94 from the 1st January, 2000, ensuring a homogeneous GDA, as opposed to the AGD66 or AGD84 in all States and Territories.

8.33. **Radio Operating Procedures**: Training is to be in accordance with established standards within each State/Territory and the Australian Emergency Manual—Communications.

8.34. **First Aid**: Adequate training in first aid is available through organisations such as the St. John Ambulance, Red Cross, or other recognised providers.

8.35. **Field craft**: Field craft is a broad subject which is difficult to define in its entirety. It is a series of practical skills which can only be taught in the field. The aspects of field craft which are important to the searcher are:
   a. searching ground by eye;
   b. judging distance;
   c. basic tracking; and
   d. living in the bush.

8.36. **Observation**: Observation is the skill of looking for clues and may be required to be conducted by day or night. The principles of clue recognition and interpretation are shown as Annex Q to this Manual.

8.37. **Observation Skills—Day**: The ability to ‘see’ rather than just look, may need to be taught when operating in the unfamiliar bush environment, and observing changes and noting details are skills which must be developed in most people. To understand why things are seen, it must be explained that several factors are involved which aid this process:
   a. **Shape**—regular shapes do not occur in nature.
   b. **Shine**—rarely do natural things shine.
   c. **Shadow**—unusual shadows will often reveal what may appear to be hidden.
   d. **Movement**—immediately attracts the eye.
   e. **Colour**—differences to the natural background are obvious to the trained eye.
   f. **Spacing**—regular spacing does not occur in nature.

These factors are best demonstrated in a bush environment, and with a better understanding of them, the searcher will become a better observer.

8.38. **Observation Skills—Night**: Due to the physical characteristics of the eye, if an observer looks directly at a small or dim object at night, it may not be seen. To optimise night vision objects should be observed ‘off centre’:
   a. **Off Centre (Averted Vision)**: To achieve ‘off centre’ vision, the eye should be ‘aimed off’ from the object about a fist’s width at arm’s length. Only by experiment can the searcher find out which direction is most suitable for their aim off ie above, below or to one side of the object. It is important that the searcher resist the temptation to look directly at the object.
   b. **Scanning**: Scanning is the short, abrupt movement of the eye over or around an area of observation or an object that is being kept in view. It is used in conjunction with off centre vision in order to gain the maximum use of the eyes at night. Therefore, the observer should move their visual axis every 4–10 seconds. Night scanning differs from day-time scanning. Should the day-time technique of looking from left to right in overlapping parallel bands from near to far be used, then nothing would be seen.
   c. **Starring**: It is important to realise that when staring at a stationary light or prominent object in an otherwise black scene, the object may start moving. This happens because the eye has no bearing on which to check the exact position. This can be prevented by ‘placing’ the object against something else such as a finger at arm’s length.
   d. **Confidence**: In order to gain confidence in the ability to see under low light levels, the correct use must be made of the eyes. Objects seen at night tend to be fuzzy and hazy.
around their extremities. Through practice, an observer must learn to recognise objects at night and how they differ from their day-time appearance. Once a searcher is familiar with the techniques of seeing at night, the confidence necessary for night operations will quickly follow.

e. **Protection of Night Vision:** Any bright light will spoil night vision. It is important that the searcher instinctively closes, or covers one eye when faced with any light at night. In addition they should:

1. avoid looking at any bright light unnecessarily;
2. shield the eyes with their hand from flares, spotlights or headlights (by so doing it is possible to see objects moving beyond the lights and it also protects the night vision);
3. avoid waving torches about as not everybody will be quick enough to close their eyes in order to avoid being dazzled;
4. put one hand over the glass when using torches to map read, and use the fingers to limit both the area illuminated and the brightness of the light (keep one eye shut and the time spent on reading the map to a minimum); and
5. use of coloured filters on torches will assist in maintaining night vision although similar coloured markings on maps cannot be seen.

8.39. **Search Techniques:** Training in search techniques is to be in accordance with Chapter 5 of this Manual.

8.40. **Team Skills:** To ensure success, it is necessary to train as a team, even if all the individual training has been undertaken.

8.41. **Searchers:** All persons involved in searches need specific skills, attributes, equipment and both physical and mental capabilities:

a. **Attitude**—Must be psychologically prepared for both the rigours of the search operation and for the possibility of locating a seriously injured or deceased person.

b. **Personal Equipment**—Each searcher must be self-sufficient in personal equipment. Such equipment should be capable of being carried on the person, in pockets or on a belt. The carriage of excess equipment should be avoided as searchers must remain highly mobile.

Suggested items include:

1. clothing and footwear appropriate to the weather and the environment;
2. appropriate headgear;
3. filled water bottles;
4. pocket knife and whistle;
5. notebook and pen;
6. compass and map (if required);
7. snacks and nibbles;
8. sun cream, insect repellent etc; and
9. minor personal first aid items.

c. **Readiness**—A readiness for the search including:

1. commitment to the task;
2. time commitment for the entire search rather than small segments of it;
3. discipline and teamwork; and
4. acceptance of hardships.

d. **Fitness**—Searchers must be sufficiently fit to cope with the physical demands for the search activity.

8.42. **Search Team Leaders:** The Search Team Leader is the vital link between the SMC and the search team. The leader must be highly trained and motivated with the experience and background knowledge which is necessary to successfully lead the team in the field. This can only be gained by constant training under realistic conditions.
8.43. **Desirable Qualities**: Land searches involve people, therefore it is essential that the Team Leader has the knowledge, experience and personality to effectively lead and control the team. The leader must be an effective manager, must be aware of the capabilities of the team, have an understanding of each member’s limitations and have their general well-being in mind. There is a need for adequate rest, food and shelter during operations and the Team Leader must ensure that this is provided.

8.44. The attributes of a Team Leader include:
   a. leadership skills;
   b. dedication;
   c. knowledge; and
   d. flexibility.

8.45. **Skills**: The main skills for a Team Leader are as follows:
   a. **Orders**—The ability to give clear, concise and detailed orders.
   b. **Map Reading and Navigation**—The ability to read a map and navigate in a variety of terrain.
   c. **Use of Radios**—Use a radio, pass messages and use the terrain to best effect.
   d. **Casualty Handling**—The Team Leader must have a sound knowledge of first aid and casualty handling procedures.
   e. **Fieldcraft**—Must be skilled in living, navigating and operating in the field.
   f. **Search Techniques**—Must be competent in the implementation of all appropriate search techniques.