

童軍技能評審計劃
Scoutcraft Accreditation Scheme

課程範圍
Syllabus

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Scoutcraft Accreditation Scheme

Introduction

1. The Scoutcraft Accreditation Scheme (the Scheme) was launched in April 2000 by the Scout Association of Hong Kong to enable Scout members and other users of the great outdoors to acquire, develop and sharpen their wilderness skills. Under the Scheme, Certificates of Proficiency are awarded to persons certifying their level of proficiency and qualifications in an approved wilderness Skill Programme after their attainment has been assessed and authenticated.

Scoutcraft Authority

2. The Scoutcraft Authority is established to administer the Scoutcraft Accreditation Scheme.

3. The Scoutcraft Authority (the Authority) gives recognition and accreditation to the proficiency level attained by individuals in the specified wilderness and outdoor Skill Programme in accordance with the provisions of the Scheme. Certificates of Proficiency of an approved Skill Programme are awarded on the basis of recognised training, authenticated practical experience and examination.

Scoutcraft

4. Scoutcraft is the locution of skills and techniques used by Scout members in outdoor adventure. It includes camping, mountaineering, knot-tying, pioneering, boating, tracking, observation, woodcraft, path-finding, backwoodsmanship, exploration and adventure in the wilderness. Since the inception of Scouting in 1907, these skill activities and programmes have been adopted with remarkable success in developing the character, physique, intelligence, dexterity, self-reliance, leadership, creativity and resourcefulness of Scout members. All trained Scouts are naturally well versed in these wilderness and outdoor skills. As a result, Scouts around the world have customarily referred these skills as 'Scoutcraft'.

Scoutcraft Accreditation Scheme

5. The Scheme is launched to promote and develop wilderness skills among Scout members and users of the great outdoors. In addition, in view of the increasing number of people using the national parks, country parks and the countryside for leisure and training, the Authority is committed to promote safety in the great outdoors and to arouse greater awareness in the preservation of the natural environment. In sum, the Scheme aims at achieving the following goals:

- (a) to encourage competence and proficiency in outdoor skills;
- (b) to promote safety through development of effective techniques, responsible attitude and sound judgement of the users of the great outdoors;

- (c) to develop confidence, self-reliance, resourcefulness and team spirit of the wilderness users;
- (d) to train competent instructors of outdoors skills as well as capable leaders to lead groups in the wilderness;
- (e) to promote environmental protection and preservation of the natural inheritance; and
- (f) to be ready of service to others in outdoor adventure and pursuits.

6. Under the Scheme, the requirements for each level of proficiency of all approved Skill Programmes are promulgated so that a candidate could follow them to acquire the required skills, to undertake the necessary field practices and to pass the examination administered by the Authority. Accomplishment of the set requirements entitles a candidate to receive the Certificate of specified Level of Proficiency of the Skill Programme concerned. This booklet entitled “Syllabus of the Scoutcraft Accreditation Scheme” promulgates the requirements set for each Level of Proficiency in all Skill Programmes approved under the Scheme.

Skill Programmes

7. It is the aim of the Authority to include in the Scheme all Scoutcraft (wilderness skills) mentioned in paragraph 4 above. However, as it is technically impossible to work out the requirements for all Skill Programmes at one go, the Authority decides to introduce the Skill Programmes by phases. The Authority would promulgate approved Skill Programmes once their requirements have been officially endorsed. The requirements for individual approved Skill Programme are subject to regular review, and where it deems fit and necessary, revision, amendments and additions will be made to update the requirements. The Skill Programmes currently offered under the Scheme are:

Campcraft, Campfire Leadership, Knotcraft, Mountaineering, Pioneering and Seamanship.

8. The Authority will add new Skill Programme in the syllabus when the detailed requirements for a new Skill Programme have been approved.

Levels of Proficiency:

9. For each approved Skill Programme, up to three progressive Levels of Proficiency are set:

Level 1 This is the Basic and Elementary Level. The Level 1 Certificate of Proficiency denotes the attainment of the essential skills and having a basic knowledge of the named Skill Programme. The holder of the Level 1 Certificate should be able to apply the essential skills effectively and independently.

Level 2 This is the High Level. The Level 2 Certificate of Proficiency denotes attainment of a high standard of skills and having an extensive knowledge of the specified skill Programme. The holder of the Level 2 Certificate should be able to apply the skill very competently and to

lead a small group of people to undertake activities of the Skill Programme.

- Level 3** This is the Advanced and Professional Level. The Level 3 Certificate of Proficiency denotes attainment of advanced skills and techniques and having a profound knowledge of the Skill Programme. The holder of Level 3 Certificate must be able to demonstrate the advanced knowledge and skills proficiently and in a professional manner, and to organise and conduct large-scale activities of the Skill Programme competently.

Training and Recognised Training Courses

10. To enable Scout members and other users of the great outdoors to learn and acquire the necessary skill, and to assist them to prepare for the open examination, the Authority runs training courses on all proficiency levels of the approved Skill Programmes. These training courses are open to all Scout members and candidates of the Scheme. Please visit the Authority's circulars and website: <http://sas.org.hk> for details of these training courses (e.g. course programme and contents, dates, venue, fees).

11. In addition, the Authority also gives recognition to Scout units both local and overseas, and other recognised organisations to conduct training courses on various levels of approved Skill Programmes for their members provided that they meet the laid down requirements (including qualifications of the Course Leader and instructors) and standards (course contents and teaching hours etc). Application for endorsement as recognised training courses should be forwarded to the Secretariat of the Scoutcraft Authority (Room 912, Hong Kong Scout Centre, 8 Austin Road, Kowloon).

Practicum

12. To ensure candidates have the adequate breadth and depth of practical experience of the Skill Programme, they are required to undertake the prescribed and elective field practices for respective Level of Proficiency of an approved Skill Programme. All required field practices must be authenticated by Instructors and Examiners of the Authority but, where applicable or practicable, persons of good standing. Detail of field practice requirements is set out in the syllabus for respective Level of Proficiency of the approved Skill Programmes (see the ensuing part of this booklet).

Examination

13. In addition to the laid down field practices, candidates are required to pass an examination of the Skill Programme concerned before they can gain the appropriate Level Certificate of Proficiency. Examination is conducted by means of: (a) open examination administered by the Authority, or (b) assessments by independent Examiners and Senior Examiners appointed by the Authority.

14. Open examination on all three Proficiency Levels of an approved Skill Programme is conducted on a yearly basis. Additional examinations will be held where demand so justifies. Level 1 Examination is open to all. Level 2 Examination is only open to candidates

who have completed a recognised training course of the Level 2 of the Skill Programme, or who hold a Level 1 Certificate of Proficiency, or equivalent. Level 3 Examination is open to candidates who have held the Level 2 Certificate of Proficiency of the Skill Programme concerned not less than six months; or who have proven field experience in the Skill Programme.

Registration of Candidates

15. The Scheme is open to all adult members of the Scout Association of Hong Kong, overseas National Scout Organisations and other recognised organisations. For the time being, only members of these organisations aged 18 and above may apply for candidateship for Level 1 to Level 3 Certificate of Proficiency of an approved Skill Programme. The Authority will periodically issue circulars announcing information on the forthcoming training courses and open examination in respect of various Levels of Proficiency of the approved Skill Programmes. All holders of Level 1 Certificate of Proficiency and above are strongly advised to register with the Authority as candidates of the Scheme so that they can receive aforementioned information in good time. Candidate registration should be made with the Secretariat of the Scoutcraft Authority. A small annual registration fee is charged to cover postage and administrative costs.

16. Plan is in hand to extend the Scheme to Scouts and young people over the age of 12 at a later stage. Once the decision of the planned extension is made, it will be promulgated in a circular of the Scout Association of Hong Kong and on the website of the Authority.

Appointment of Instructors

17. “Teaching and learning grow together” and “practices help sharpening one’s skills and understanding of a learned skill”. The Authority thus encourages holders of Level 2 Certificate of Proficiency and above to become instructors of the Skill Programme. The duties of an Instructor are to conduct skill instructions in training courses and to authenticate the performance of the candidates in field practices. Instructors are divided into two classes: **Instructor** and **Senior Instructor**.

18. Instructors are qualified for conducting training course of Level 1 Proficiency of the Skill Programme concerned; and Senior Instructors are qualified to organise and conduct training courses at all Levels of Proficiency of the Skill Programme.

19. Members who meet the laid down qualifications both in skill proficiency and instructional techniques (see paragraphs 21 to 25 below) may apply to the Authority for appointment as Instructor. The Authority will appoint those who are competent and qualified, and having the calibre and capability in carrying out the duties and responsibility of an instructor to be Instructors and Senior Instructors.

20. The appointment of an Instructor and Senior Instructor is normally valid for a period of three years. The appointment is renewable subject to the appointee having met the service requirements and displaying suitable personality, good conduct, and competence in instructional techniques.

Instructors

21. To qualify for appointment as an Instructor of an approved Skill Programme, a person must (a) hold Level 2 Certificate of Proficiency of the Skill Programme; and (b) have adequate experience or training in instructional techniques. Being a member of the Training Team of the Association; a teaching staff of an education, professional or vocational institution; an appointed instructor of a discipline force or uniformed group; or completion of a recognised training on instructional techniques organised by a reputable organisation/institution will be regarded as fulfilment of the requirements for training and experience in instructional techniques.

22. The Authority will, from time to time, organise tailor-made Course of Instructional Techniques for holders of Level 2 Certificate of Proficiency who do not have the formal instructional techniques qualification so as to equipping them with the necessary instructional skills and to enabling them to be qualified as an Instructor.

23. An Instructor is qualified to lead and conduct training courses leading to Level 1 Certificate of Proficiency of the Skill Programme. An Instructor is also entitled to authenticate the practicum and field practices undertaken by candidates up to Level 2. At times, an Instructor may be invited to assist in conducting an examination of the Skill Programme.

Senior Instructors

24. To qualify for appointment as a Senior Instructor*, one must (a) hold Level 3 Certificate of Proficiency of the Skill Programme; (b) have proven experience in training and development; (c) have been an Instructor of the Skill Programme for more than 15 months; (d) have adequate breadth and depth of experience in skill instruction at various Levels of Proficiency of the Skill Programme; and (e) demonstrate effective and competent instructional skills in the key skill areas of the Skill Programme at all levels.

[***Note:** Senior Instructors and Senior Examiners of the “Seamanship” Skill Programme are required to hold the “Pleasure Vessel Operator Grade 2 Certificate of Competency” issued by the Marine Department before appointment.]

25. A Senior Instructor is qualified to be the Course Director of training courses of Level 1 and Level 2 Proficiency of the Skill Programme concerned. However, he/she needs the prior endorsement from the Authority before he/she can assume the Course Directorship of a training course at Level 3 of the Skill Programme. In addition to skill instruction, supervision of field practices and authentication of practicum performed by candidates, Senior Instructors may be invited to assist in examination.

Appointment of Examiners

26. The Authority regularly identifies those Instructors and Senior Instructors who have the competence, capability, calibre and commitment for appointment as examiners of the Skill Programme concerned. Examiners are involved in the planning, organising and conducting examinations for candidates who want to qualify for Certificate of Proficiency of various Levels of the Skill Programme.

27. Examiners are divided into two classes: **Examiner** and **Senior Examiner**.

Examiners

28. To qualify for appointment as an Examiner of a Skill Programme, a person must (a) hold Level 2 Certificate of Proficiency of the Skill Programme; (b) have served as an Instructor of the Skill Programme for more than 12 months during which he/she has been actively involved in the instruction work of the key skill areas of the Skill Programme, and or supervision of field practices performed by not less than 6 candidates.

29. Examiners are assigned to undertake different roles, functions and duties in examinations of the Skill Programme concerned up to Level 2. They are also required to supervise and coach candidates in field practices of the Skill Programmes.

Senior Examiners

30. To qualify for appointment as a Senior Examiner, one must (a) hold Level 3 Certificate of Proficiency of the Skill Programme; (b) have served as a Senior Instructor of the Skill Programme for more than 15 months; (c) have served as an Examiner of the Skill Programme for 12 months or more, and (d) have adequate breadth and depth of experience in skill instruction at Level 2 and Level 3 Proficiency of the Skill Programme. Senior Examiners are involved in examination, skill instruction and monitoring of field practices at all levels.

Further Advancement

Specialist Level

31. To encourage veterans to further develop the skill and knowledge of the highest significance and rigour, the Authority offers “Specialist Level” programme for each approved Skill Programme for highly competent and capable candidates. The Specialist Level of an approved Skill Programme is open to all holders of Level 3 Certificate of Proficiency, Senior Instructors and Senior Examiners. Specialist Level is achieved by engaging oneself in a profound and in-depth study of a particular subject or area of the Skill Programme. The time to be spent in the study should not be less than 300 hours over a period of 18 months or more. The study should be of practical value and helps further development of specific techniques and areas of the Skill Programme. Inter-disciplinary study may be allowed.

32. Detail for candidateship in respect of the Specialist Level will be issued to prospective candidates on request.

Enquiries

33. News and information of the Scoutcraft Authority and the Scoutcraft Accreditation Scheme such as training courses, examination arrangements and other items will be announced in the periodical circulars of the Authority. The circulars will be uploaded to the website of the Authority and sent to the registered candidates direct.

34. The office of the Scoutcraft Authority is situated at Room 912, Hong Kong Scout Centre, Scout Path, Austin Road, Kowloon. It is manned by a group of volunteers and its

office hours are from 7:30 pm to 9:30 pm every working Friday. Outside these hours, enquires about the Scoutcraft Authority and the Scoutcraft Accreditation Scheme should be made at the Training Branch of the Association (Room 908 of the Scout Centre) and telephone number 2957 6477.

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Camcraft

Level 1

1 Camping Gears

- 1.1 Checklists of personal and team gears for short (less than 4 days) and long (over 5 days) camp in warm, cool and cold seasons;
- 1.2 Criteria for selecting personal and team camping gears including tents, rucksacks (backpacks), sleeping bags, clothing, footwear, cooking gears and stoves;
- 1.3 Possession of a set of personal camping gears for both warm and cold seasons; and
- 1.4 Packing of gears for a camping activity.

2 Site Work

- 2.1 Criteria for choosing a camp site;
- 2.2 Layout of a camp site for various functions and activities e.g. sleeping area, kitchen area, working area, washing area, water point, first-aid area, activity area and quartermaster area;
- 2.3 Fencing a camp site;
- 2.4 Basic principles of setting up a camp kitchen, water point, washing area and toilet;
- 2.5 Gadgets for use in a standing camp of 3 days duration or more e.g. for shelving and storage of food and gears, for work and for dining;
- 2.6 Tent-pitching;
- 2.7 Construction of shelter for work; and
- 2.8 Strike camp.

3 Health and Hygiene

- 3.1 Construction of a toilet and a washing area for a team for a 3-day camp;
- 3.2 Methods in keeping the camping area and facilities in hygienic condition at all times;
- 3.3 Garbage disposal and treatment for used water;
- 3.4 Methods and efforts to keep water point and source clean; and
- 3.5 Morning layout for personal and team camp gears.

4 Camp Catering and Cooking

- 4.1 Layout of a camp kitchen with stoves at waist level;
- 4.2 Menu planning for a 3-day camp including recipe and way of cooking;
- 4.3 Use of different types of stoves using LP gas, kerosene (or liquid fuel), solid fuel, firewood and charcoal;
- 4.4 Food storage in camp in particular during hot season;
- 4.5 Ways to keep food fresh and clean;
- 4.6 Preparing and cooking of 3 full meals in an outdoor kitchen; and
- 4.7 Fire safety at campsite and vicinity.

5 Outdoor Skills

- 5.1 30 basic knots, hitches and lashings useful in camp e.g. Reef knot, Figure-of-eight knot, Clove hitch, Overhand knot, Bowline, Sheepshank, Sheet bend, Running bowline, Bowline on a bight, Manharness knot, Rolling hitch, Highwayman hitch, Round turn and two half hitches, Cow hitch, Tarbuck knot, Fisherman's knot,

- Simple whipping, Western country whipping, Back splicing, Square lashing, Diagonal lashing, Sheer lashing (end-to-end) and Shear lashing (sheer legs);
- 5.2 Construction of a tripod and a flagpole;
- 5.3 Use of Swiss-army type folding knife and folding spade;
- 5.4 Map reading (map legend or conventional signs, colour representation, grid reference, scale, contour lines) and use of compass (direction and bearings, forward and back bearing);
- 5.5 Finding direction with a wristwatch and stars;
- 5.6 Personal survival kit; and
- 5.7 Country code.

6 First Aid

- 6.1 Treatment for minor cut and wound, bites, stings, blisters, abrasion, sunburn and scald; and
- 6.2 Personal first aid kit.

7 Planning Skills

- 7.1 Planning of a standing camp over 3 days for a team of 7 campers or more; inclusive of selection of site, preparation work, transportation, budget, gears, food and menu, programme activities, allocation of duties and contingency plan.

8 Nature Knowledge

- 8.1 Knowledge of 10 types of tree and other 10 types of plant commonly seen in the country side; and
- 8.2 Prevention of hill fire.

9 Camping Experience

- 9.1 Camp under tent for not less than 20 nights in 10 different localities including two nights at Hong Kong Gilwell Campsite (or, for non-Hong Kong participants, a campsite of comparable popularity in their country); and
- 9.2 Camp log and/or records for camping activities participated.

Level 2

1 Camping Gears

- 1.1 Checklist of camping gears and equipment for a group of 35 or more campers;
- 1.2 Practical knowledge of personal and group camping gears including design, construction, materials, functions, durability, price and suppliers;
- 1.3 Transportation of group camping tears to and from a camp site; and
- 1.4 Care, minor repairs and maintenance of personal and group gears at camp site and in a camping equipment store-room.

2 Site Work

- 2.1 Site plan for a camp for at least 35 campers;
- 2.2 Washing and toilet facilities for a 3-day camp;
- 2.3 Setting-up of a camp kitchen in a non-permanent campsite;
- 2.4 Design and construction of a camp gate for a group of 35 campers;
- 2.5 Improvised camp gadgets for the group; and
- 2.6 Production of the site map or plan of a campsite giving full detail on ground.

3 Health and Hygiene

- 3.1 Construction of latrines for a group of 35 campers for 4 days and maintaining them in hygienic conditions and free from odour at all times;
- 3.2 Major considerations in setting up washing area or facilities at camp for the group; and
- 3.3 Methods of waste, garbage and water disposal in non-permanent campsite.

4 Camp Catering and Cooking

- 4.1 Basic facilities and gears for a centralized camp kitchen for at least 35 campers;
- 4.2 Advantages and disadvantages of centralized and decentralized cooking for a large camping activity;
- 4.3 Menu planning for a 3-day camp for 35 campers including quantity, menu and costs;
- 4.4 Acquisition and preparation of food for 35 campers in a 3-day camp under tent;
- 4.5 Organization of catering for 35 campers;
- 4.6 Preparation of a dinner for 35 campers, including purchasing, cooking and serving, with the assistance of not more than two other persons; and
- 4.7 Fire-lighting with natural material using not more than 3 matches and then use it to boil 500 ml of water.

5 Camping Skills

- 5.1 20 additional knots used in outdoor and camping activities e.g. Figure-of-eight loop, Triple bowline, Double fisherman's knot, Double sheet bend, Marlinespike hitch, Slipped hitches, Angler's loop, Carrick bend, Prusik knot, Sail-maker's whipping and Eye splicing;
- 5.2 Use and maintenance of axe, spade, pruning tools and bush saw;
- 5.3 Finding direction by vegetation and other natural phenomena;
- 5.4 Camp inspections (morning, night and final): why and what to inspect; and
- 5.5 Ability and skills in leading programme activities such as games, songs, activity bases, and skills instruction.

6 First Aid

- 6.1 Treatment for shock, fractures, sprains, dehydration, heat exhaustion, heat stroke, hypothermia, bleeding and unconsciousness;
- 6.2 Use of different types of first aid bandages;
- 6.3 Moving an injured person; and
- 6.4 First aid pouch or box for a long camp.

7 Planning Skills

- 7.1 Reasons for going to camp;
- 7.2 Types of camp;
- 7.3 Planning of a standing camp of 3 days duration or more for a group of 35 campers with details on work schedule, duty allocation among staff, budget and finance, acquisition, collection and transportation of gears, food and catering, transport and travelling arrangements for campers, site plan and preparations, setting up of sanitary facilities, health and hygiene observations, pre-camp procedures (parental consent and other necessary formalities), insurance, training and/or briefing for participants, first aid service, programme activities and contingency plan; and
- 7.4 Programme planning and implementation of camping activities.

8 Nature Knowledge

- 8.1 Cloud formation and associated weather;
- 8.2 Weather conditions in different seasons;
- 8.3 Weather conditions associated with frontal systems; and
- 8.4 Terminology used in weather forecast and reading a synoptic weather map.

9 Camping Experience

- 9.1 Camp under tent for over 40 nights in more than 20 localities under different weather conditions;
- 9.2 Precautions to be made for camping in severe weather, heavy rain and strong wind;
- 9.3 Personal camp log and/or records of camping activities participated; and
- 9.4 Camp administration: records keeping, budget, book-keeping, correspondence.

10 Others

- 10.1 Facilities set up in the Country Park (or National Park) and the work the Government and environmental groups are doing in containing pollution in our countryside.

Level 3

1 Camping Gears and Quartermastership

- 1.1 Checklist of camping gears and equipment required for a group of 100 or more campers in a permanent campsite for 4 or more days;
- 1.2 Quartermastering in a large camping or residential activity;
- 1.3 Transportation of camping gears for a group of over 100 campers to and from a camp site;
- 1.4 Leadership in organizing and leading a team of staff in quartermastering work and setting up all camping gears and equipment; and
- 1.5 Complete checklist of gears and equipment required for a 6-day or longer camp aboard (other than Macau, Guangdong Province, and Hainan Province) e.g. World and Regional Jamboree.

2 Site Work

- 2.1 Complete list of basic provisions and facilities of a permanent camp site, both under tent and in hostel type accommodation, for 100 or more campers inclusive of dormitory, kitchen, washroom, toilet, dining and other amenities;
- 2.2 Basic knowledge of maintenance of various essential facilities in permanent campsites and residential facilities;
- 2.3 Facilities and measures to upkeep the hygienic and sanitary standards in a campsite for 100 or more persons;
- 2.4 Knowledge of new camping gears and equipment;
- 2.5 Erection of marquees or large tents (for 10 or more persons);
- 2.6 Construction of gadgets with modern materials and devices; and
- 2.7 Building a natural shelter for 2 persons.

3 Health and Hygiene

- 3.1 Methods in maintaining toilets and washrooms in a permanent campsite in clean and hygienic conditions at all times;
- 3.2 Different methods of waste disposal in a permanent campsite;
- 3.3 Knowledge of the drainage system and sewage disposal measures in a campsite

- meeting the environmental requirements; and
- 3.4 Water supply and storage in a permanent campsite.

4 Camp Catering and Cooking

- 4.1 Basic facilities and gears required in a camp kitchen for 100 campers or more;
- 4.2 Food and menu planning for a 3-day camp for 100 campers or more;
- 4.3 Acquisition and preparation of food for 100 campers in a residential camp;
- 4.4 Organization of catering for a group of 100 campers;
- 4.5 Ways and measures to keep the dining area clean and sanitary;
- 4.6 Use of stoves set up in a permanent camp to prepare and cook a dinner for a group of 35 persons, with the assistance of not more two other persons; and
- 4.7 Cleansing of soot found in cooking utensils after use on firewood or charcoal.

5 Camping Skills

- 5.1 Use and maintenance of mechanical equipment used in a permanent camp site e.g. grass-cutting machine, power-saw and drill;
- 5.2 Finding direction at night by moon;
- 5.3 Making a sundial in camp; and
- 5.4 Construction of camp gadget using natural materials for use by 7 persons.

6 First Aid

- 6.1 Artificial resuscitation;
- 6.2 Treatment for frostbite, dislocation and poisoning; and
- 6.3 Tackling accidents in camp.

7 Planning Skills

- 7.1 Planning of a standing camp of 3 days duration or more for 100 campers under tent or in hostel with details on work schedule, staffing, organization structure, budget and financial sources, administration, accommodation allocation, equipment and gears, hygiene and health facilities, catering and food supply, transport and travelling arrangements for campers, first aid and/or medical service, programme activities, religious observation for campers, pre-camp procedures (parental consent and other necessary formalities), insurance, training and/or briefing for participants, and contingency plan.

8 Nature Knowledge

- 8.1 Prominent constellations visible in different seasons e.g. Orion, Aries, Taurus, Canis Major, Leo, Lyra and circumpolar constellations of Ursa Major and Cassiopeia.

9 Camping Experience

- 9.1 Camp under tent for over 50 nights in more than 30 localities in different seasons and weather conditions, including at least one international camp, and one camp of long duration (over 5 days) in overseas country or mainland other than Macau, Guangdong and Hainan Provinces;
- 9.2 Assisting in training activities on camping skills; and
- 9.3 Organization and leading a campfire for a group of 30 persons or more.

10 Camp Administration

- 10.1 Administration of a long camp at different stages: **before** (camp information for campers and their parents, obtaining permission from authorities and owners

concerned, estimate and budget, correspondence, accounts system, preparing notices, collection of camp fees, personal data of campers and staff, dietary consideration, religious observation, shopping list, and equipment list); **during** (personal records, records of camper movement, book-keeping, loss and found, defects of equipment recorded and repaired, notice-board, dissemination of information to campers, notes of illness and medical treatment); and **after** (thank-you letters, correspondence, settlement of bills and accounts, audited accounts statements, camp log books, report, action on damaged or faulty equipment, and reunion).

Campfire Leadership

[No Level 1 is offered]

Level 2

1 Prerequisite

- 1.1 Completion of a Campfire Leader Course or a Sing Song Course, or be a holder of Level 1 Certificate of any skill subject of the Scoutcraft Accreditation Scheme, or equivalent; and
- 1.2 Possession of a personal campfire blanket or a campfire robe.

2 Basic Knowledge

- 2.1 Aim and purpose of campfires;
- 2.2 Legendary stories and development of the campfires;
- 2.3 Roles and functions of a Campfire Leader;
- 2.4 Courtesy, etiquette and discipline of campfires; and
- 2.5 Design and production of a campfire robe.

3 Campfire Circle

- 3.1 Knowledge of 3 or more existing Campfire Circles;
- 3.2 Criteria in selecting a site for setting up a campfire circle in a camping ground including its location, size, light and sound matters, fire safety, security, privacy and environmental consideration, preservation of vegetation and refraining nuisance caused to the vicinity;
- 3.3 The lay-out of a campfire circle including access path, entry and exit, lay-out plan, seating plan, provision of natural or artificial seats for staff and participants, performance arena, place to keep spare firewood and fire-fighting items;
- 3.4 Building a campfire for over 50 people including the choice of firewood, skills in cutting log and wood for use in campfire, construction of a suitable fire tower, preparations required for facilitating restoration of the ground (both hard and soft ground) after campfire;
- 3.5 Fire matters: torch for the starting ceremony, fire-lighting, preparation to make a fire to start and grow, keeping and regulating the fire in tune with the programme of the campfire;
- 3.6 Effective ways to put out bonfire and ashes; and to clean up the campfire circle after a campfire; and
- 3.7 Safety precautions including fire prevention measures, fire fighting gears, first aid items and emergency lighting.

4 Planning and Organisation

- 4.1 The composition of the staff team for a campfire: the roles and functions of each position;
- 4.2 Duties and responsibility of the Campfire Leader;
- 4.3 Production of a campfire programme for a group of over 50 people during an overnight camp with a good mix of balance, variety and highlights: the traditional procedures and programme items of a Scout Campfire, appropriate arrangements of programme items for different parts of the campfire;

- 4.4 Planning of an one-off campfire event including theme of the event, selection and booking of the venue, formation of the staff team, budgeting, publicity of the event, ground preparation work, admission arrangement for participants, transportation of participants and gears, seating arrangements, toilets and changing facilities, performance arena or stage, lights, sound and visual effects, disposal of refuse and waste, restoration of the site to its original condition, dispersal of participants, security and safety issues;
- 4.5 Campfire ceremonies including the starting and closing rituals; presentation of the programme of the campfire, introducing and welcoming a special guest; and
- 4.6 Contingency plan for a campfire in case of unfavourable weather (raining or too windy) and unsuitable conditions (wet ground).

5 Skills and Techniques

- 5.1 Well conversant with over 120 campfire songs including not less than 80 of them are included in the Campfire Song List published by the Scoutcraft Authority (see Appendix III);
- 5.2 Able to create and maintain the atmosphere of a campfire to suit the occasion;
- 5.3 Able to lead and teach different types of campfire songs including traditional Scout songs, part and round songs, split songs, and action songs;
- 5.4 Able to lead cheers and yells;
- 5.5 Able to tell a yarn during a campfire; and
- 5.6 Planning and organisation of an indoor campfire.

6 Experience

- 6.1 Involvement as a performer in 3 or more performance items in different campfires;
- 6.2 Having served as a staff member in not less than 10 campfires performing different roles and duties including Song Leader, Cheer Leader, Yell Leader, Fire Keeper, Quartermaster and a leading Campfire Leader;
- 6.3 Keeping a personal Campfire Song Book consisting of not less than 100 favourite songs for campfires; and
- 6.4 Keeping a personal Campfire Log recording the major Campfires participated e.g. date, venue, theme and title of the event, the organiser, number of participants and groups they belong, staff list and his/her own position in the campfire; new songs, stunts, yells, cheers, games and ideas learnt or appreciated, personal notes and comments.

Note: Attainment of Level 2 of the Campfire Leadership of the Scoutcraft Accreditation Scheme will be accredited as a “Campfire Leader”.

Level 3

1 Prerequisite

- 1.1 Attaining Level 2 of the Campfire Leadership of the Scoutcraft Accreditation Scheme; or being an official Campfire Leader appointed by a recognised organisation;
- 1.2 Having served as a staff member in 5 large (with over 200 participants) campfires or more; and
- 1.3 Possession of a distinctive personal campfire robe and head gear.

2 Basic Knowledge

- 2.1 Origin and history of campfires;
- 2.2 Campfires of different countries or ethnical groups e.g. aboriginal, African, Gipsy, American Indian, Miao, nomadic;
- 2.3 Educational and recreational significance of campfires; the place of campfire in the Scout Programme;
- 2.4 Duties and responsibilities of the Campfire Leader of a large campfire. Qualities and core competencies of a Campfire Leader;
- 2.5 Different types of campfire costumes;
- 2.6 Design and production of a distinguished campfire robe for the chief guest; and
- 2.7 Etiquette, tradition and conventional programme of a campfire.

3 Campfire Circle

- 3.1 Detailed lay-out design of a large campfire circle (for 200 and more participants);
- 3.2 Essential provisions and facilities of a large campfire circle;
- 3.3 Criteria in setting up a permanent campfire circle: location, adequacy in accommodating the intended number of participants, entrance and emergency exits, fire place, sitting area or stand for participants, environmental and nuisance considerations, wind, flame and smoke effects, sound and lighting matters, fire safety and security issues;
- 3.4 Ground preparations for building the fire place of a large campfire: removing a turf and re-turfing it after the campfire, measures to prevent accidental break-out of fire and damage likely caused by fire to the ground, effective means to restore the site to its original condition;
- 3.5 Building of different types of fire for a large campfire such as pyramid fire, cone fire, log cabin fire, and top lighter fire. Comparison of the advantages and disadvantages of different types of fires;
- 3.6 Firewood management: choice of firewood, the properties of different types of wood, procurement and preparation of firewood for a campfire, materials for lighting a fire, production of torches for starting a fire and lighting-up a campfire circle, estimated consumption of firewood, use and maintenance of tools for a campfire such as axes, saws, spades and knives;
- 3.7 Fire lighting: surprise starting of a campfire, use of different types of lighting items such as matches, lighter using different fuels; and
- 3.8 Safety precautions: fire-fighting equipment such as fire extinguishers and fire hose, first aid box, emergency lighting facilities and public address system, evacuation plan.

4 Planning and Organisation

- 4.1 The size and composition of the staff team for a large campfire: duties and responsibility of each staff member;
- 4.2 Roles and functions of the Chief Campfire Leader;
- 4.3 The elements of an enjoyable and successful campfire: time and duration, good mix of variety and balance of the programme items, comfort and relaxation of the participants, the ability of a Campfire Leader in the creation and maintenance of the atmosphere and mood of the campfire;
- 4.4 Programme planning for a large campfire: good variety of appropriate items and songs for different segments of the campfire; competency of the staff team, production of detailed programme schedule, items to be avoided for inclusion in the programme;
- 4.5 Campfire ceremony and traditional rituals of a Scout campfire including starting and closing; introducing and welcoming a special guest, prayer or moment of silence, taps; and
- 4.6 Contingency plan for a large campfire and dealing with emergency in case of increment weather, poor ground conditions, or undesirable circumstances.

5 Skills and Techniques

- 5.1 Leadership skills; leading and management of the campfire staff team;
- 5.2 Competency in conducting a campfire for 200 or more people, generating the desired atmosphere and maintaining the active participation of the participants;
- 5.3 Well conversant with 200 or more campfire songs with not less than 160 of them are set out in the published Campfire Song List (see Appendix III);
- 5.4 Competency in leading and teaching different types of campfire songs including traditional Scout songs, folk songs of different nations and ethnical groups, round and parts songs, split songs, repetition songs, action songs, parodies, shanties, spiritual songs and hymns;
- 5.5 Production of opening phrases/verses for 5 different campfires;
- 5.6 Preparation of prayers for campfires;
- 5.7 Production of script, story-board or synopsis for 5 performance items of campfires;
- 5.8 Folk, ethnical and/or national dances suitable for a campfire;
- 5.9 Competency in leading yells and cheers;
- 5.10 Leading campfire games; and
- 5.11 Preparation of yarns for campfires and telling a yarn.

6 Experience

- 6.1 Having served as a leading staff member in not less than 5 large campfires;
- 6.2 Demonstration of all-round competencies of a Campfire Leader;
- 6.3 Participating in 5 or more campfires with participants from more than 4 countries, cities or ethnical groups; and
- 6.4 Keeping a personal Campfire Log Book containing comprehensive descriptions and illustrations (photographs/drawings) of memorable campfires participated plus a collection of various types of campfire songs, opening phrases and verses, yells, cheers, stunts, programme items, yarns, prayers and dances etc

Note: Attainment of Level 3 of the Campfire Leadership of the Scoutcraft Accreditation Scheme will be accredited as “Senior Campfire Leader”.

Knotcraft

(Effective from June 2009)

Level 1

1 Cordage and Terminology

- 1.1 Terminology of rope work and knotting;
- 1.2 Choice and care of utility cordage for knot-tying;
- 1.3 Materials and construction of natural fibre and synthetic ropes;
- 1.4 Coiling of rope and prevention of kinks; and
- 1.5 Simple treatment to rope ends to prevent them from fraying and unlaying.

2 Knot-tying

- 2.1 Mastery of knots, hitches, bends, loops, whipping, splices and lashings set out in Knot List A (see Appendix I).

3 General Application

- 3.1 Slinging a big barrel or oil drum;
- 3.2 Construction of a trestle;
- 3.3 Lashing a block to a spar or trunk;
- 3.4 Mousing the hook of a pulley;
- 3.5 Making slings for use as improvised sit harness;
- 3.6 Tying a bulky cubical parcel;
- 3.7 Tying a pile of books of uneven sizes;
- 3.8 Slinging a spherical object such as basket ball or water melon;
- 3.9 Slinging a bundle of spars or water pipes; and
- 3.10 Tying up two to three bottles together for easy carrying.

4 Functional Knots

- 4.1 Practical knowledge of knots used in camping and hiking.

5 Fancy and Decorative Knots

- 5.1 Making a woggle; and
- 5.2 Making 3-strand and 4-strand plain (flat) sinnets.

Level 2

1 Cordage and Tools

- 1.1 Classification and characteristics of natural fibre and synthetic ropes;
- 1.2 Selection criteria of cordage for uses in camping, climbing, boating and decorative knotting;
- 1.3 Treatment and preparation of new ropes for use;
- 1.4 Different methods of sealing rope ends apart from splicing and whipping including tubing, taping, use of glue, waxing, liquid vinyl sealing and heat sealing;
- 1.5 Construction of a simple rope-making device and using it to produce a rope of 2 m long; and
- 1.6 Working knowledge of basic rope work tools such as knife, scissors, pliers, forceps, hot knife, fids, marlinespike, wire loop, whipping twine, adhesive tapes, netting needles, and seaming palm.

2 Knot-tying

- 2.1 Mastery of knots, hitches, bends, loops, whipping, splices, and lashings set out in Knot Lists A and B (see Appendix I); and
- 2.2 Tying 10 basic knots in complete darkness including bowline, clove hitch, figure of eight knot, fisherman's knot, overhand knot, reef knot, round turn and two half hitches, sheepshank, sheet bend and timber hitch.

3 General Application

- 3.1 Making a grommet;
- 3.2 Construction of a simple ladder over 2 m in length using combination of ropes and sticks, bamboo or pegs;
- 3.3 Making a knot board to display a group of basic knots;
- 3.4 Reeving a set of single and double pulleys;
- 3.5 Rope tackle; and
- 3.6 Construction of a rope stretcher to carry a patient.

4 Functional Knots

- 4.1 Practical knowledge of knots used in boating and pioneering.

5 Fancy and Decorative Knots

- 5.1 Making a simple lanyard;
- 5.2 Making round and square sinnets;
- 5.3 Making an ocean plait and a square mat
- 5.4 Making a Turk's Head of three leads and four bights; and
- 5.5 Net-making.

Level 3

1 Cordage and Tools

- 1.1 History and folklore of rope work and knotting;
- 1.2 Management of a storage for ropes and rope work tools, and maintenance and cleansing of ropes and tools;
- 1.3 Properties of different types of ropes e.g. construction, materials, weight, elongation, breaking strength, safety working strength, and the weakening effect of different types of knots on a rope;
- 1.4 Principles of rope work such as size and make of ropes for specific uses, estimation of the length of ropes required, unlaying and laying of rope;
- 1.5 Good knowledge of literature and publications on knots, knotcraft and rope work including "Ashley Book of Knots" and publication produced by not less than 3 other well-known knot-tiers; and
- 1.6 Describe the theory in producing different number of lead and bight of a Turk's Head.

2 Knot-tying

- 2.1 Mastery of knots, hitches, bends, loops, whipping, splices, and lashings set out in Knot Lists A, B and C (see Appendix I).

3 General Application

- 3.1 Making a fancy lanyard;
- 3.2 Production of a thematic knot board;
- 3.3 Construction, using ropes only, of two different types of rope ladders each over 2 m in length;
- 3.4 Making a wall hanging;
- 3.5 Making a chest becket;
- 3.6 Making a rope fender;
- 3.7 Making a bell rope; and
- 3.8 Using Turk's Head (20 cm in length) to make a protector for a pole.

4 Functional Knots

- 4.1 Demonstration of magic or tricks with knots and ropes; and
- 4.2 Practical knowledge of knots used in any one of the following activities (a) climbing and caving, (b) angling, or (c) sailing.

5 Fancy and Decorative Knots

- 5.1 Demonstration of various macramé and decorative knots tied in the western countries; **or alternatively,**
- 5.2 Demonstration of basic Chinese macramé (e.g. Button knot, Cloverleaf knot, Cross knot, Double coin knot, Double connection knot, Flat knot, Good luck knot, Pan chang knot, Plafond knot, Round brocade knot, and Sauvastika knot) and their variations.

6 Development

- 6.1 Planning, organizing and conducting activities to advance knot craft and knot-tying techniques;
- 6.2 Competency in giving instruction on technical knots and rope work; and
- 6.3 Knowledge of local, national and international organizations for the promotion and pursuit of knot tying.

Mountaineering

Level 1

1 Gears and Equipment

- 1.1 Personal gears and equipment required for a 3-day hiking over 50 km in summer, autumn and winter;
- 1.2 Choosing and buying hiking gears including clothing, footwear, tent, cooking gear, stove, sleeping bag, backpack, and water bottle;
- 1.3 Principles of packing and load-carrying; and
- 1.4 First aid kit and survival kit.

2 Map and Navigation

- 2.1 Basic principles of map reading (legend, marginal information, conventional signs, scales and measurement of distance, representation of relief, contour lines and their vertical interval, colour representation, direction, grid system, declination, and setting a map), map care and gears;
- 2.2 Use of ordnance survey map and topographic map;
- 2.3 Use of base-plate and prismatic compasses (direction, bearing, correction for deviation);
- 2.4 Combined use of compass and maps (back bearings, orienting the map with a compass, true north and grid north, locating a mapped object in the field and an observed object on map);
- 2.5 Use of sun, stars and watch to find direction; and
- 2.6 Navigating methods (aiming off, contouring, detouring, use of handrail) in different terrain.

3 Skills

- 3.1 Camping skills for staying overnight in a safe, comfortable and hygienic manner (tent pitching, choice of camp site, essential site work during a hiking, latrine and keeping the site in better conditions after use);
- 3.2 Use of different types of portable camping stoves and cooking in open country;
- 3.3 Food and nutritional needs for hiking;
- 3.4 Basic knots used in hiking;
- 3.5 Route planning techniques (choice of routes and stopover points, selection of site, distance and speed of travel, rationing, escape and emergency alternate routes, source of aids, preparation of route cards, application of related formula such as the Naismith's Rules);
- 3.6 Walking skills (pace, rhythm, foot placing, conservation of energy, balance and co-ordination) in all terrain (uphill, downhill, over boulders, crossing streams) and needs for physical warming-up exercise before setting off;
- 3.7 Understanding of weather forecast and synoptic weather maps;
- 3.8 Country code; and
- 3.9 Safety measures in hiking.

4 First Aid and Dealing with Accident

- 4.1 Ability to prevent and deal with sunburn, burns and scalds, cuts and wounds, insect stings, blisters, cramps, sprained ankle, heat exhaustion, nose bleed, foreign object in the ear and snake bite;

- 4.2 Wound dressing; and
- 4.3 Methods of summoning help or assistance: International Alpine Distress Signal.

5 Experience

- 5.1 Have hiked more than 160 km;
- 5.2 Field knowledge of Macle hose Trail and Wilson Trail and 5 of the following country parks (production of log books or journey notes) **:
 - Sai Kung West Country Park
 - Ma On Shan Country Park
 - Shing Mun Country Park
 - Tai Mo Shan Country Park
 - Lantau North Country Park
 - Lion Rock Country Park
 - Tai Tam Country Park; and
- 5.3 Acquaintance with the principal routes to the summit or the highest accessible point of the following hills in Hong Kong: Tai Mo Shan, Ma On Shan, and Lion Rock **.

** Note: For overseas participants, the requirement will be national parks and trails of comparable standing and difficulty.

Level 2

1 Gears and Equipment

- 1.1 Personal gears and equipment for an expedition of 5-day duration or more in both local and overseas country;
- 1.2 Good organisation of gears carried by members of an expedition team;
- 1.3 Practical knowledge of choosing gears to keep yourself warm and dry outdoor in severe weather, and comfortable in long walk; and
- 1.4 Care and maintenance of hiking gears.

2 Map and Navigation

- 2.1 Mastery of map and compass (different types of maps used in expedition and travel, legends and conventional signs used in various types of maps, different methods showing relief, resection, cross-section, gradients, relationship of gradient and distance, inter-visibility, bearings of sunset and sunrise);
- 2.2 Locating position in forest, desert and snow;
- 2.3 Universal Transverse Mercator (UTM) Grids;
- 2.4 Navigation and map reading aids (altimeter, pedometer, romer, and protractor);
- 2.5 Nature clues in finding direction;
- 2.6 Use of Global Position System (GPS) receiver; and
- 2.7 Map making by triangulation using prismatic or base-plate compass, and plane-tableing.

3 Skills

- 3.1 Camping skills for trekking;
- 3.2 Cooking under bad weather conditions such as strong wind and heavy rain;
- 3.3 Cooking different kinds of expedition food including dehydration, canned, dried, preserved and natural food;
- 3.4 Lighting a fire with natural materials;

- 3.5 Building a natural shelter;
- 3.6 Methods in keeping food safe (free from animal, contamination and deterioration) at all times (in camp and on the move);
- 3.7 Expedition Team Leader techniques in mountains: leader and tailman, psychology of the group, corporate strength; team procedures on different terrain e.g. scree, narrow ridge, steep broken slope;
- 3.8 Planning and organisation skills such as route planning principles, assessment of members' experience, strength and ability, and allocation of duties;
- 3.9 Understanding of typical weather associated with warm and cold masses and changes of weather at different air fronts;
- 3.10 Understanding of effects of temperature, wind and water on human body in cases of hypothermia and exhaustion; and
- 3.11 Safety on mountains.

4 First Aid and Dealing with Accident

- 4.1 (In addition to those listed in Level 1) Ability to deal with shocks, bruises, open wound, severe bleeding, heart attack, hypothermia, gastrointestinal illness, fractures and dislocation;
- 4.2 Artificial resuscitation;
- 4.3 Moving an injured person;
- 4.4 Distress signals; and
- 4.5 Procedures in dealing with an accident in wild country such as drowning, fallen from height, lightning strike, and hill fire.

5 Experience

- 5.1 Hiking experience over 350 km with not less than 10 nights stayed in the wilderness;
- 5.2 Field knowledge (principal routes, places of interest) of 10 country parks in Hong Kong including Sai Kung East Country Park, Plover Cove Country Park, Pat Sin Leng Country Park, Lantau South Country Park, and Tai Lam Country Park**; and
- 5.3 Acquaintance with the principal routes to the summit or the highest accessible point of the following hills in Hong Kong: Castle Peak, Sharp Peak, Lantau Peak, Sunset Peak, Pak Sin Leng and Wong Leng**.

** Note: For overseas participants, the requirement will be national parks and trails of comparable standing and difficulty.

Level 3

1 Gears and Equipment

- 1.1 Personal gears required for mountaineering and long expedition (over 7 days) overseas in all weather conditions;
- 1.2 Profound knowledge of the design, construction, materials, performance, and durability of various types of camping and mountaineering equipment, both personal and team items; their care and maintenance, and the effects of wind, temperature and humidity to these equipment;
- 1.3 Knowledge of new camping and mountaineering equipment available in the market; and

- 1.4 Basic rock climbing gears e.g. synthetic kernmantel ropes, helmet, karabiners, and abseiling rings.

2 Map and Navigation

- 2.1 Advanced map and compass field work, and use of all types of maps and compasses; the bearing of the sun at noon at a position south or north of the Tropics
- 2.2 Map datum (e.g. World Geodetic System) and Grid Systems available for civilian use in major countries including UTM, Ordnance Survey of Great Britain (OSGB) and United States Geological Survey (USGS);
- 2.3 Longitude and Latitude, special latitude lines, Greenwich Meridian, calculation of length of daylight time in different seasons;
- 2.4 Main features and functions of GPS receiver (level of accuracy, reliability and care and maintenance) and other similar devices;
- 2.5 Navigation in low visibility; and
- 2.6 Map-making methods.

3 Skills

- 3.1 Camping skills at high altitude, in desert, jungle or snow/ice area;
- 3.2 Cooking at high altitude;
- 3.3 Cooking without utensil;
- 3.4 Basic rock techniques including knots, use of ropes and slings, use of safety belt and harness, belay methods and interchange of belay, abseiling, and prusiking;
- 3.5 Techniques in wading streams and crossing rivers (best crossing points, crossing with and without line);
- 3.6 Techniques in walking in high mountains;
- 3.7 Techniques in either: (a) crossing desert or dry lands, or (b) travelling across ice-field;
- 3.8 Team walking skills: use and limitations of hill-walking safety line, use of rope as a handrail and for linking members together; and
- 3.9 Outdoor leadership techniques.

4 First Aid and Dealing with Accident

- 4.1 (In addition to those listed in Level 1 and Level 2) Ability to deal with unconsciousness, poisoning, frostbite, snow blindness, altitude sickness and prevention, cold injuries, broken limb, animal bites and head injury;
- 4.2 Carrying an injured person for long distance (over 2 km);
- 4.3 Procedures in dealing with emergency in mountainous country e.g. forest fire, ice-breaking; and
- 4.4 Methods of search and rescue in mountain areas; improvised mountain rescue equipment.

5 Experience

- 5.1 Hiking experience over 500 km;
- 5.2 Field knowledge of the country parks in Hong Kong or national parks of comparable standing in overseas country and the Mainland;
- 5.3 Overseas expedition experience for over 3 consecutive nights covering a walking distance over 50 km;
- 5.4 Experience in walking not less than 5 km in desert, forest, or ice area;
- 5.5 Carrying out a study into the following subject(s) in at least one of the expeditions: geology, flora, fauna, local history, history of mountaineering, history of place of

- 5.6 interest, customs, local life etc.; and
Knowledge of camping, hiking, adventurous or mountaineering clubs/organisations, both local and abroad, which accept youth and adult members and provide relevant training.

Pioneering

(Revised in November 2008)

Level 1

1 Rope and Cordage

- 1.1 Characteristics of various types and sizes of natural fibre and synthetic ropes useful in camping and pioneering;
- 1.2 Terminology of rope work, knotting and pioneering; and
- 1.3 Choice and care of ropes for pioneering.

2 Knotting

- 2.1 Mastery of the following knots:
 - (a) Bends – Fisherman’s knot, Sheet bend;
 - (b) Hitches – Cat’s paw, Clove hitch, Half hitch, Killick hitch, Lark’s head, Reef knot, Rolling hitch, Round-turn and two half hitches, Sheepshank, Timber hitch;
 - (c) Loops – Bowline and Figure-of-eight loop;
 - (d) Whipping – Ordinary whipping;
 - (e) Lashings – Diagonal lashing, Figure-of-eight lashing, Shear lashing, Sheer lashing, Square lashing, Tripod lashing; and
 - (f) Splices -- Back splice, Eye Splice.

3 Pioneering Tools

- 3.1 Use and care of essential pioneering gears and tools including bamboo, spars, knife, hammer, mallet, hand axe and spade; and
- 3.2 Safety rules of using pioneering gears and tools.

4 Pioneering Skills and Techniques

- 4.1 Whittling tent pegs, trimming light timber and chopping firewood;
- 4.2 Estimation of distances (less than 800 m) and heights (lower than 30 m) with personal measurement and improvised apparatus;
- 4.3 Mousing a hook;
- 4.4 Trestle construction;
- 4.5 Block and tackle;
- 4.6 Lashing of a block to a spar or trunk;
- 4.7 Simple holdfast for pioneering: single picket and 2-1 picket;
- 4.8 Levering theories;
- 4.9 Parbuckle; and
- 4.10 Throwing of a 15 m line to a target object.

5 Practical Experience

- 5.1 Take a leading part in the following pioneering work:
 - (a) construction of a flag pole;
 - (b) construction of simple and light bridge;
 - (c) construction of sheer legs;
 - (d) construction of a camp table for a patrol of six persons; and
 - (e) construction of a raft.
- 5.2 In collaboration with others, completion of 20 or more pioneering projects set out

in the Pioneering Projects Categorization List (see Appendix II) so as to:

- (a) accumulate a total of 40 credits value* or more; and
- (b) accomplish at least 4 projects from each of the 4 types of pioneering projects (i.e. Bridge and Crossing; Tower, Lifting and Height; Raft; and Fun and Game).

[* Note: Each project under Category A carries 1 credit; Category B, 2 credits and Category C, 3 credits. For Level 1, the span of bridge and crossing should exceed 3 m, high projects should exceed 3 m, cranes should lift a load of at least 50 kg through a height of at least 2 m, and the raft should carry at least one person.]

Examination

Candidates are required to construct 4 or more pioneering projects (included in Category A and Category B of the Pioneering Projects Categorization List) selected from a small batch of drawings or models presented by the Examiner. The batch of projects to be included in the forthcoming examination may be promulgated well in advance.

Level 2

1 Rope and Cordage

- 1.1 Selection criteria of ropes for use in pioneering. Construction (material and lay) and properties (weight, strength, weakening effect of knots) of various types of natural fibre and synthetic ropes used in pioneering and climbing;
- 1.2 Construction of a simple rope-making device and using the device to make a rope of 3 metres or longer; and
- 1.3 Different methods to seal rope ends in addition to whipping and splices including plastic tubing, use of adhesive tape, use of glue, liquid vinyl sealing and heat sealing.

2 Knotting

- 2.1 Mastery the following knots in addition to those set out in Level 1:
 - (a) Stopper Knots -- Heaving line knot, Monkey's fist;
 - (b) Bends – Carrick bend, Double Sheet bend, Surgeon knot;
 - (c) Hitches – Marlinespike hitch, Prusik knot, Scaffold hitch, Taut-line hitch, Transom knot;
 - (d) Loops – Bowline-on-a-bight, Double bowline;
 - (e) Whipping – Sail-maker's whipping;
 - (f) Lashings – Single snake lashing, Double snake lashing, Filipino lashing, Japanese square lashing, Tourniquet lashing;
 - (g) Splices -- Long splice, Short splice; and
 - (h) Coiling – different types of coiling of rope (Fireman's coil, Figure-of-eight coil, Alpine coil).

3 Pioneering Tools

- 3.1 Use and maintenance of tools for rope work and pioneering including felling axe, saw, trenching tools, pulleys; and personal climbing gears such as sit harness and karabiners; and
- 3.2 Comprehensive knowledge of block and tackle including mechanical advantage, velocity ratio, understanding of reeving to advantage and reeving to disadvantage.

4 Pioneering Skills and Techniques

- 4.1 Making of models of pioneering projects;
- 4.2 Ascending by prusiking and abseiling using only ropes;
- 4.3 Calculation of distances, heights, lengths and angles by geometrical and trigonometric theories;
- 4.4 Three ways to make a simple ladder of 3 m in length, such as single post ladder, pegs and marlinespike hitches, series of small loops on rope;
- 4.5 Reeving of a set of single and double sheave pulleys;
- 4.6 Anchorage suited to a variety of projects, location and soil including loose and marshy ground, and hold-fast theories: 2-1, 3-2-1, deadman, log and picket;
- 4.7 Theory of tree felling;
- 4.8 Rope tackle;
- 4.9 Spanish windlass; and
- 4.10 Transportation of odd size heavy objects to a height of 3 m such as a bundle of long pipes, spherical items, and bulky case.

5 Practical Experience

- 5.1 Take a leading part in the following pioneering work:
 - (a) construction of a high tower;
 - (b) construction of a full set of gadgets for a camp kitchen;
 - (c) bridge construction; and
 - (d) building of an aerial runway.
- 5.2 In collaboration with others, completion of 40 or more pioneering projects set out in the Pioneering Projects Categorization List (see Appendix II) so as to:
 - (a) accumulate a total of 80 credits value* or more; and
 - (b) accomplish at least 8 projects from each of the 4 types of pioneering projects (i.e. Bridge and Crossing; Tower, Lifting and Height, Raft; and Fun and Game).

[* Note: Each project under Category A carries 1 credit; Category B, 2 credits and Category C, 3 credits. For Level 2, the span of bridge and crossing should exceed 5 m, high projects should exceed 4 m, cranes should lift a load of at least 70 kg through a height of at least 2 m, and the raft should carry 2 or more persons.]

Examination

Candidates are required to construct 4 or more pioneering projects (included in Category B and Category C of the Pioneering Projects Categorization List) selected from a small batch of drawings or models presented by the Examiner. The batch of projects to be included in the forthcoming examination may be promulgated in advance.

Level 3

1 Rope and Cordage

- 1.1 Analysis of the advantages and disadvantages of various types of natural fibre and synthetic ropes used in pioneering activities;
- 1.2 Practical care of natural fibre ropes and identification of the causes of damages to ropes including abrasions, cuts, contusions, heat, strong sunlight, chemical attack,

- dampness and mildew;
- 1.3 Ways to protect ropes from various causes of damages; and
- 1.4 Steps and procedures to carry out inspection and examination of ropes before and after uses.

2 Knotting

- 2.1 Mastery of the following knots on top of those listed in Levels 1 and 2:
 - (a) Hitches – Harvester’s hitch, Highwayman’s hitch, Turk’s head;
 - (b) Loops – Alpine butterfly; Tarbuck knot, and Water bowline; and
- 2.2 Capability to tie the following knots in total darkness: Bowline, Clove hitch, Figure-of-eight loop, Fisherman’s knot, Reef knot, Sheepshank, Sheet bend, Square lashing, and Diagonal lashing.

3 Pioneering Tools

- 3.1 Quartermastership and management of a store of pioneering gears and equipment, including effective methods in classifying, labelling and storing bamboos, spars, ropes, and assorted pioneering tools; keeping all types of records such as journals, log books, forms for issues and returns of items; and maintaining the store in good working condition.

4 Pioneering Skills and Techniques

- 4.1 Principles of pioneering;
- 4.2 Physics theories applied in pioneering;
- 4.3 Use of basic climbing gears to ascend and descend;
- 4.4 Effective management and accomplishment of a pioneering project: analysis of the problem, site survey, selecting the most effective project among feasible alternatives to resolve the problem, developing action plan and work schedule, assembly of gears and materials required, allocation of duty among members, implementing the action plan and co-ordination of work, monitoring of work progress, completion of the project and evaluation;
- 4.5 Pioneering as a tool for leadership development and team building;
- 4.6 Planning and organisation of large-scale pioneering events; and
- 4.7 Responsibility and accountability of the organiser of pioneering activities: safety precautions, standard of care, risk management, personal and agency liability, and procedures in dealing with emergency.

5 Practical Experience

- 5.1 Take a leading part in the following pioneering work:
 - (a) construction of a Pyramid Tower;
 - (b) building of a sophisticated Camp Gate;
 - (c) construction of a Monkey Bridge; and
 - (d) building of a raft with sail;
- 5.2 In collaboration with others, completion of 60 or more pioneering projects set out in the Pioneering Projects Categorization List (see Appendix II) so as to:
 - (a) accumulate a total of 120 credits value* or more; and
 - (b) accomplish at least 10 projects from each of the 4 types of pioneering projects (i.e. Bridge and Crossing; Tower, Lifting and Height, Raft; and Fun and Game); and

[* Note: Each project under Category A carries 1 credit; Category B, 2 credits and Category C, 3 credits. At this level, the span of bridge and crossing should

exceed 8 m, high projects should exceed 5 m, cranes should lift a load of at least 100 kg through a height of at least 2 m, and the raft should carry 4 or more persons.]

- 5.3 Construction of a pioneering project of own unaided design. The design should show sufficient originality to prove competent pursuit of the activity. The design papers should include drawing, sketches and/or a scale model and the scheme of work that includes detail of all necessary gears and an estimate of the time involved.

Examination

Candidates are required to construct 4 or more Category C pioneering projects selected from a small batch of drawings or models presented by the Examiner. The batch of projects to be included in the forthcoming examination may be promulgated well in advance.

Seamanship

(Effective from June 2009)

Level 1

1 Pre-requisite and Basic Knowledge

- 1.1 Demonstrate the following skills in water: swim 50 m in clothes, tread water for more than 2 minutes, and dive through the underneath of a pulling boat;
- 1.2 Tie the following knots: Anchor hitch, Bowline, Clove hitch, Figure-of-eight knot, Reef knot, Round turn and two half hitches, Sheet bend and Double sheet bend;
- 1.3 Make a common whipping and a Sailmaker's whipping; and
- 1.4 Heave a lifeline from a boat to a distance of 10 m.

2 Gears and Equipment

- 2.1 Choose appropriate personal clothing and footwear for boating activities;
- 2.2 Understand the different functions of a life jacket and buoyancy aid jacket, and demonstrate the proper way to wear them;
- 2.3 Understand gears and equipment for boating activities; and
- 2.4 Understand the care and maintenance of a pulling boat and its accessories.

3 Knowledge of craft

- 3.1 Name the parts of the following types of craft: pulling boat, sailing boat and power-driven rescue boat; and
- 3.2 Have a good knowledge of the elementary principles and maintenance of outboard engine up to 4 hp, and understand how to install the engine onto the boat not exceeding 3 m in length, and uninstall it.

4 Navigation

- 4.1 Know the available sources of weather information and warnings, and give correct interpretation of weather information received; and
- 4.2 Have a good knowledge of the effects of wind, tides and currents in navigation.

5 Boating Technique

- 5.1 Understand the duties and disposition of crew on board;
- 5.2 Understand the commands used on board including pulling boat, sailing boat and power-driven boat;
- 5.3 Scull a dinghy and pick up an object from water;
- 5.4 Prepare an anchor, and demonstrate how to drop the anchor and pull it up manually;
- 5.5 Understand how to launch and lift a boat from pier and slipway including pulling boat, sailing boat and power-driven boat;
- 5.6 Maneuver and navigate a small craft (not exceeding 3 m) with an outboard engine up to 4 hp along shore and in a bay; and
- 5.7 Take part in an exercise on board a power-driven boat to tackle a task such as towing

another boat to shore, and picking up a person overboard or capsized.

6 Safety

- 6.1 Understand the use and rules of code of flags and signals in Sea Activities Centres of the Scout Association of Hong Kong;
- 6.2 Know the safety rules applicable to water activities;
- 6.3 Know how to deal with minor cuts, bleeding, and heat stroke;
- 6.4 Demonstrate the use of roller bandage and triangular bandage;
- 6.5 Demonstrate a capsizing drill with a small boat;
- 6.6 Have basic knowledge of rescue by boat, and understand the principles of sea rescue; and
- 6.7 Understand the principles of combustion and how to extinguish fire onboard.

7 Practice

- 7.1 Sail with a helmsman for a cruise and show good knowledge in judging wind and current;
- 7.2 Form part of a crew of a pulling boat, sailing boat or power-driven boat to go on a journey to demonstrate capability and competency in carrying out the duties and responsibilities in the crew, and in understanding the commands and instructions given; and
- 7.3 Form part of a crew in an 8-hour journey on board of a pulling boat to demonstrate the basic skills in maneuvering and to accomplish a given task.

Level 2

1 Prerequisite and Basic Knowledge

- 1.1 Hold Level 1 Proficiency Certificate of Seamanship, or equivalent;
- 1.2 Understand the International Regulations for Preventing Collisions at Sea, local rules, signals of distress and sound signals in restricted visibility;
- 1.3 Understand the racing rules and prevention of collision rules for sailing, mark of the courses, procedures and steps of starting and finishing a sailing race;
- 1.4 Understand the theory of sailing, and demonstrate rigging and reefing a sail boat on shore for different weather conditions; and
- 1.5 Make Back splice, Eye splice and Short splice.

2 Gears and Equipment

- 2.1 Have a sound understanding of personal gears and equipment for boating activities such as clothing, plimsoll, and life jacket;
- 2.2 Name the key components and parts of an outboard engine; and
- 2.3 Have a good knowledge of the gears and equipment of different types of boats used in Sea Activities Centres of the Scout Association of Hong Kong and their fittings.

3 Navigation

- 3.1 Have a sound working knowledge of compass on deck: taking bearings and using cross bearings or intersection to plot one's position;
- 3.2 Able to read a nautical chart, and understand the symbols and data provided therein including features in harbour and at estuaries; and
- 3.3 Able to plot position lines and fix position on chart.

4 Safety

- 4.1 Carry out the procedure of capsize drill in all types of boats in Sea Activities Centres of the Scout Association of Hong Kong;
- 4.2 Understand the safety precaution and procedures in rescuing a stranded boat;
- 4.3 Perform resuscitation to a drowned person and place an injured person in the recovery position;
- 4.4 Demonstrate how to perform Cardiopulmonary Resuscitation (CPR); and
- 4.5 Treat internal bleeding, shock, hypothermia and heat exhaustion.

5 Boating Technique -- Pulling Boat

- 5.1 Understand and make the following Bosun's (Boatswain's) calls: "The Still", "Carry On" and "The Side" ;
- 5.2 Be able to give pulling boat orders as the coxswain of a crew, and steer a pulling boat on course;
- 5.3 Steer the boat to leave and berth a jetty or a buoy;
- 5.4 Tow a small dinghy through an obstacle course;
- 5.5 Demonstrate "man overboard" drill, and rescue a boat stranded in shadow water; and
- 5.6 Maneuver a pulling boat without rudder: to berth and leave it from a jetty or a buoy, and to complete a figure of eight course.

6 Boating Technique -- Pulling Boat with sail

- 6.1 Rig a pulling boat and reef a sail on shore;
- 6.2 While afloat, go on a triangular course and return, lift the boat onto the shore, and put it in shelter;
- 6.3 Demonstrate good techniques in five essentials of sailing including sail setting, centreboard, trim, balance and course made good;
- 6.4 Launch a sailing boat from jetty and return. Sail from a buoy and return;
- 6.5 Come alongside an anchored ship or boat;
- 6.6 Understand the basic rules of road in sailing and actions to be taken when approaching other boats such as "Port gives way to starboard", "The windward boats keeps clear" and "The overtaking boat keeps clear";
- 6.7 Understand the dangerous zone while sailing near the leeward or at a close distance with another sailing boat;
- 6.8 Under sail, carry out a "man overboard" drill; and
- 6.9 Demonstrate righting of a capsized boat.

7 Boating Technique – Handling a Boat (not exceeding 3 m) with an Outboard Engine up to 4 hp

- 7.1 Know how to maintain an outboard engine and keep it serviceable;
- 7.2 Fix an outboard engine to a boat and unload it after use;
- 7.3 Start an outboard engine in the right procedures; and
- 7.4 Maneuver a boat fitted with an outboard engine to leave the jetty and berth again.

8 Practice and Service

- 8.1 Perform service not less than 8 hours in a Sea Activities Centre of the Scout Association of Hong Kong, or any boating centre of a recognized organization; and
- 8.2 Form part of a crew to complete 4 separate journeys in 3 or more local waters, one of them should last longer than 24 hours; and submit a sea log for these journeys.

Level 3

1 Pre-requisite and Basic Knowledge

- 1.1 Hold Level 2 Proficiency Certificate of Seamanship or equivalent;
- 1.2 Know the rules and regulations applicable to Hong Kong waters;
- 1.3 Have a good knowledge of the coastal waters;
- 1.4 Have a good knowledge of the buoyage system in use in Hong Kong waters (including shapes, colours, lights and top-marks of cardinal, lateral, isolated danger, safe water and special marks buoys), navigation signals and distress signals;
- 1.5 Have a general knowledge of the principles of ship stability and trimming. Understand the meaning and relationship of centre of gravity (CG) and centre of buoyancy (CB);
- 1.6 Understand lights exhibited by high speed craft and sailing junks in Hong Kong waters; and
- 1.7 Be able to tie knots commonly used in boating activities.

2 Navigation

- 2.1 Have a sound practical knowledge of abbreviations and symbols used on nautical chart relating to depth of water, buoys, lights, pipelines, submarine cables, wrecks, rocks and tidal streams;
- 2.2 Be able to describe the key features of the passage plotted on the nautical chart;
- 2.3 Use a compass on deck to take bearings. Understand the factors affecting the accuracy of a magnetic compass and how to approximate the error, such as magnetic variation and deviation;
- 2.4 Able to plot and report a position by latitude and longitude, and bearing and distance;
- 2.5 Use different types of navigation instruments such as compass, lead line, and Global Position System receiver to plot positions on chart;
- 2.6 Able to read the synoptic charts and based on the information provided in a weather chart, forecast the forthcoming weather, wind speed and direction;
- 2.7 Have a general knowledge of local weather patterns. Understand at least two natural

- signs of the approaching weather;
- 2.8 Understand the characteristics of barometric pressures and Beaufort Wind Scale;
- 2.9 Understand the significance of Typhoon Signals No 1, 3, 8 and the Strong Monsoon Signal together with associated sea and swell conditions;
- 2.10 Have a good practical knowledge of the Hong Kong tide table, tidal stream atlas and tidal information from charts of Hong Kong waters. Calculate the tide level and understand the spring and neap tides; and
- 2.11 Understand the Twelfth's Rule, and use it and the tide table to plan a sea activity.

3 Safety and Rescue

- 3.1 Demonstrate the skills of personal survival in the water after being thrown overboard;
- 3.2 Have a good knowledge of the lifesaving equipment (life jackets, life buoys and buoyant items) and fire fighting equipment carried on boat, and the use of distress signals (hand held red flares and orange smoke signal);
- 3.3 Carry out a fire drill on a pulling boat and a small power boat;
- 3.4 Understand action to be taken in event of collision, grounding, springing a leak and fire on board;
- 3.5 Understand the steps and procedures in abandoning a pulling boat; and
- 3.6 Know how to make report on a reportable incident.

4 Boating Technique -- Pulling Boat

- 4.1 Understand different types of anchors for pulling boat;
- 4.2 Use a sea anchor; and
- 4.3 Steer a pulling boat without a rudder and perform a "man overboard" drill in rough water.

5 Boating Technique -- Sailing Boat (with another crew)

- 5.1 Rig a dinghy using the boat's equipment;
- 5.2 Hoist a spinnaker, and use trapezes;
- 5.3 Have a good working knowledge of anchoring including the principles and techniques used in anchoring, hauling off and returning to lee shore;
- 5.4 Demonstrate the techniques in sailing upwind and sailing downwind on a restricted course including beating, reaching and running;
- 5.5 Stop a boat by heaving-to;
- 5.6 Recover a crew overboard;
- 5.7 Leave a beach, pontoon, mooring, lee shore and weather shore, and return;
- 5.8 Demonstrate the techniques in sailing backward, sailing in a tight circular course, reefing afloat, mooring and coming alongside an anchored boat;
- 5.9 Sail without either a centerboard or a rudder; and
- 5.10 Tow another dinghy with sail.

6 Boating Technique – Power Boat (up to 4 hp)

- 6.1 Have a good knowledge of the elementary principles of an outboard engine;

- 6.2 Start the outboard engine, operate the gears, make sharp turns and stop the engine immediately in emergency;
- 6.3 Understand the procedures and safety precaution of refilling and changing the oil tank of the engine at sea;
- 6.4 Clear up rubbish adhered to propeller;
- 6.5 Understand action to be taken in event of loss of rudder, loss of anchor and lost or fouled propeller;
- 6.6 Deal with the breakdown of the engine;
- 6.7 Know how to deal with fire broken out in the outboard engine and the fuel system; and
- 6.8 Carry out minor repairs to the motor engine on shore and at water.

7 Practice and Service

- 7.1 Form part of a crew to complete a voyage of not less than 50 km lasting 3 days and 2 nights. During the voyage, the crew should complete a project approved by the Examiner. The voyage should be accomplished by rowing and sailing. Power may be used to cover not more than 20% of the voyage. A detailed route plan for the voyage should be submitted in advance. The log of the journey and project report should be submitted within one month; and
- 7.2 Take an active part in the planning, organizing and leading of large-scale water activities such as Sea Regatta and Boat Race.

Appendix 附錄 I
Knot List 繩結列表

List A 繩結列表 A

Type 類別	Name of List A Knots 列表 A 繩結名稱
<p>Knots including Bends, Hitches and Loops</p> <p>各類型繩結（包括連接繩結、栓綁繩結及套環）</p>	<ol style="list-style-type: none"> 1. Bale Sling Hitch 包索吊結 2. Barrel Sling 木桶吊結 3. Blood Knot/Barrel Knot 手足結/吊桶結 4. Bowline 稱人結 5. Bowline-On-A-Bight 繩耳上之稱人結 6. Carrick Bend 金錢結/雙金錢結 7. Cat's Paw 螺旋掛結/貓爪索 8. Clove Hitch 雙套結 9. Crown Knot 皇冠結 10. Double Overhand Knot 雙重反手結 11. Double Sheet Bend 雙接繩結 12. Figure-of-Eight Knot 8字結 13. Fireman's Chair Knot 消防椅結 14. Fisherman's Bend 漁人接結 15. Fisherman's Knot 漁人結 16. Guyline Hitch (Taut-line Hitch) 營繩結 (緊繩索) 17. Half Hitch 半結 18. Highwayman's Hitch 馬賊結 19. Killick Hitch 石錨結/拉索結 20. Lark's Head (Cow Hitch) 雀頭結 (牛索) 21. Loop Knot 圈結 22. Man-harness Knot 苦力結 23. Overhand Knot 反手結 24. Reef Knot 平結 25. Rolling Hitch 三套結 26. Round-Turn And Two Half Hitches 繫木結 27. Scaffold Hitch (Oklahoma Hitch/ Pole Hitch/ Pole Lashing/ Plank Sling) 吊板結/掛板結 (俄克拉何馬結/棍索/棍編結/驢鞦板結) 28. Sheepshank 縮繩結 29. Sheet Bend 接繩結 30. Stopper Knot 繩尾結 31. Surgeon Knot 外科結 32. Timber Hitch 曳木結 33. Tom Fool Knot 愚人結 34. Wall Knot 胡桃結
<p>Splices 織結（又稱叉繩）</p>	<ol style="list-style-type: none"> 35. Back Splice 繩端織結 36. Eye Splice 鳳眼織結 37. Short Splice 短織結
<p>Whipping 繩端結</p>	<ol style="list-style-type: none"> 38. American Whipping 美式繩端結 39. Common (Ordinary) Whipping 普通繩端結 40. West Country Whipping 西部繩端結

Type 類別	Name of List A Knots 列表 A 繩結名稱
Lashings 編結（又稱繫棍結 或捆紮結）	41. Diagonal Lashing 十字編結 42. Figure-Of-Eight Lashing 8字編結 43. Gyn Lashing (Tripod Lashing) 三腳架編結 44. Sheer Lashing 接棍編結 45. Sheer Leg Lashing 剪立編結 46. Square Lashing 四方編結

List B 繩結列表 B

Type 類別	Name of List B Knots 列表 B 繩結名稱
<p>Knots including Bends, Hitches and Loops</p> <p>各類型繩結（包括連接繩結、栓綁繩結及套環）</p>	<ol style="list-style-type: none"> 1. Angler's Loop 絡頭結 2. Blackwall Hitch 掛結 3. Bill Hitch 槓桿式掛結 4. Bowline Bend 稱人接結 5. Buntline Hitch 帆索結 / 舉帆索 6. Chinese Cloverleaf Knot 酢漿草結 7. Constrictor Knot 袋口結 / 緊壓結 8. Double Blackwall Hitch 加強掛結 9. Double Bowline 雙稱人結 10. Double Fisherman's Knot 雙漁人結 11. Figure-Of-Eight Loop 8 字活圈 12. Gibbet Knot 絞刑結 13. Halter Hitch 拴馬結 / 纏繩結 14. Handcuff Knot 手扣結 15. Harness Bend 吊帶結 16. Harvester's Hitch 滑輪代用結 17. Heaving Line Knot 拋繩結 18. Japanese Bend 四平結 19. Jar Knot (Bottle knot) 瓶口結 20. Marlinespike Hitch 纜錐結 21. Matthew Walker Knot (Single) 單索股結 / 木桶把手結 22. Middleman's Knot 捕獸結 / 中間人結 23. Midshipman's Hitch 副官索 24. Monkey's Fist 猴拳結 25. Mooring Hitch 碼頭結 26. Noose (Simple) 簡單繩套 27. Packer's Knot (Parcel Knot) 包裹結 28. Pile Hitch 桅頂結 29. Prusik Knot 攀緣結 30. Racking Bend 網紮結 31. Sailor's Knife Lanyard Knot 金錢式鑽石結 32. Spanish Bowline 西班牙稱人結 33. Stevedore's Knot 碼頭工人結 / 船纜結 34. Strangle Knot 勒緊結 35. Thief Knot 賊結 36. Transom Knot 橫樑結 37. Triple Bowline 三重稱人結 38. Turk's Head 頭巾結 / 領巾圈結 / 鑽石結 39. Weaver's Knot 左手接繩結
<p>Splices</p> <p>織結（又稱叉繩）</p>	<ol style="list-style-type: none"> 40. Chain Splice 鎖鏈織結 41. Long Splice 長織結
<p>Whipping 繩端結</p>	<ol style="list-style-type: none"> 42. Sail-maker's Whipping 帆工繩端結

Type 類別	Name of List B Knots 列表 B 繩結名稱
Lashings 編結（又稱繫棍結 或捆紮結）	43. Chain Stitch Lashing 鎖鏈編結 44. Double Snake Lashing 雙蛇形編結 45. Filipino Diagonal Lashing 菲律賓十字編結 46. Gilwell Scaffold Lashing 基維爾吊板編結 47. Japanese Square Lashing 日本四方編結 48. Snake Lashing 蛇形編結 49. Tourniquet Lashing 壓脈扭紋編結

List C 繩結列表 C

Type 類別	Name of List C Knots 列表 C 繩結名稱
<p>Knots including Bends, Hitches and Loops</p> <p>各類型 (包括連接繩結、栓槓繩結及套環)</p>	<ol style="list-style-type: none"> 1. Alpine Butterfly Knot 阿爾卑斯山蝴蝶結 2. Arbor Knot 線轆結 3. Ashley's Stopper Knot 雅氏繩尾結 4. Backhand Hitch 反手索 5. Bachmann Knot 伯民結 6. Bag Knot (Miller's Knot) 袋索 7. Bimini Twist 比迷你結 8. Boa Knot 蟒蛇結 / 束綁結 9. Boom Hitch 帆桿結 10. Bowstring Knot/Honda Knot 弓弦結/頭套結 (牛仔套環) 11. Chain Hitch 鎖鏈結 12. Chinese Button Knot 中國紐結 13. Chinese Lanyard Knot (Plafond Knot) 藻井結 14. Crossing Knot 交叉結 15. Diamond Knot 鑽石結 16. Diamond Hitch 鑽石索 17. Double Bowline-On-A-Bight 雙重繩耳上之稱人結 18. Double Figure-of-Eight Hitch 雙 8 字套結 19. Double Magnus Knot 雙滾索 20. Double Matthew Walker Knot 雙層索股結 21. Eskimo Bowline 愛斯基摩稱人結 22. Farmer's Loop 農夫結 23. Fiador Knot 西班牙馬具結 24. Flemish Bend 廻 8 字結 25. Gaff Topsail Halyard Bend 桅帆結 26. Good Luck Knot 吉祥結 27. Ground Line Hitch 活拖網索 28. Guide Knot 雙重 8 字結 29. Hangman's Knot 吊頸結/絞刑手結 30. Hanson Knot 韓新結 31. Heaving Line Bend 扯纜接結 32. Hunter's Bend 亨達結 33. Icicle Hitch 冰柱結 34. Klemheist Knot 變形抓結 / 卡氏結 35. Jury Mast Knot 桅桿結 36. Lighterman's Hitch 駁船結 / 雙半結 37. Man Rope Knot 長形寶石結 38. Ossel Hitch 刺網結 / 漁網索 39. Ossel Knot 網頂結 / 漁網結 40. Palomar Knot 帕洛馬結 41. Portuguese Bowline/French Bowline 葡萄牙稱人結/法國稱人結 42. Running Bowline 活稱人結 43. Scaffold Knot 索端嵌環套結 44. Seizing Bend 纏紮結 45. Shamrock Hitch 山酢漿草結 46. Tarbuck Knot 他拔結 47. Three-way Sheet Bend 三頭接繩結 48. True Lover's Knot 同心結 49. Trucker's Hitch /Waggoner's Hitch 貨運索結 50. Turle Knot 鈎孔結

Type 類別	Name of List C Knots 列表 C 繩結名稱
	51. Water Bowline 水中稱人結 52. Zeppelin Bend 飛船結 / 齊柏林結

Pioneering Projects Categorization List 先鋒工程項目表

Category A -- A 級工程項目

(A) Tower, Lifting and Height 高台、起重工程和高空事工

- 1 Ten-minute Tower 10 分鐘高台
- 2 Derrick 起重機
- 3 Lift and Rope 繩索升降機

(B) Bridge and Crossing 橋樑和橫越設施

- 1 Commando Bridge 突擊隊雙索橋
- 2 Patrol Swing Bridge 小隊擺動橋
- 3 Scout Transporter 童軍渡河支架
- 4 Transporter Bridge 雙架纜索橋

(C) Raft 浮筏

- 1 Bamboo and Spar Raft 竹棍筏
- 2 Catamaran 簡單浮筏
- 3 Ferry Raft 橫水渡式浮筏
- 4 Sausage Raft 香腸浮筏

(D) Fun and Game 遊樂設施

- 1 Bouncing Bazooka 彈跳火箭筒
- 2 Flaming Bolt Launcher 煙火發射架
- 3 Flying Trapeze 空中飛人架
- 4 Guided Missile Launcher 導向飛彈發射器
- 5 Kenya Canister 肯尼亞瀆毒罐
- 6 Scout Staff Ballista 童軍棍發彈器
- 7 Skylite 吊燈架
- 8 Skylon Weathercock 摩天風向計
- 9 Wigan Flagstaff H 型旗桿架

Category B -- B 級工程項目

(A) Tower, Lifting and Height 高台、起重工程和高空事工

- 1 Cable Car 纜車
- 2 Extending Tower 活動升降高台
- 3 High Hoist 滑動攀高架
- 4 Monopole Tower 單柱瞭望台
- 5 Stilt Tower H型瞭望台
- 6 Davits 吊艇架
- 7 Ducking Stool 浸刑架
- 8 Elevated Tent 升高帳幕
- 9 Log Winch 樹幹絞貨機
- 10 Lookout Lift 三角升降瞭望台
- 11 Pile Driver 打樁機
- 12 Swinging Derrick 旋轉起重機
- 13 Swing Derrick Mark II 旋轉起重機二型
- 14 Swinging Derrick on a Tree 樹幹旋轉起重機
- 15 Thai Fishing Net 泰式漁網

(B) Bridge and Crossing 橋樑和橫越工具

- 1 Abington Spring /Suspension Bridge 亞炳頓彈跳橋／吊橋
- 2 Banana Bridge 香蕉橋
- 3 Bushman's Bridge 原野樹枝橋
- 4 Counterweight Bridge 墜力升降橋
- 5 Counterweight Bridge Mark II 墜力升降橋第二型
- 6 Derrick Draw Bridge 獨桿雙梯升拉橋
- 7 Double Swing (Round) Bridge 雙重旋轉橋／木輪橋
- 8 Drawbridge 吊拉橋
- 9 Gilwell Drawbridge 基維爾吊拉橋
- 10 Ladder Bridge 梯橋
- 11 Ladder Bridge to the Tree 連樹梯橋
- 12 Light Pole Bridge 輕型棍橋
- 13 Permanent Road Bridge 固定支架橋
- 14 Portcullis Drawbridge 吊閘橋
- 15 Revolving Derrick Bridge 旋轉扯高橋
- 16 Seesaw Bridge 蹺蹺板橋
- 17 Single Lock Bridge 吊鎖橋
- 18 Single-Lock Trestle Bridge 支架單鎖橋
- 19 Swing Bridge 旋轉橋
- 20 Swinging Drawbridge 轉動吊橋
- 21 Transporter Ladder Bridge 井字形支架梯橋
- 22 Aerial Transporter 空中運輸盤
- 23 Gantry 滑動架
- 24 Ravine 橫越深坑工程

- 25 Simple Runway 簡單滑車
- 26 Swamp 濕地移動法

(C) Raft 浮筏

- 1 Coracle 輕便小船
- 2 Oil Drum Raft 油桶造浮筏
- 3 Outrigger Raft 渡河浮筏
- 4 Tarpaulin Raft 防水布造浮筏

(D) Fun and Game 遊樂設施

- 1 Catapult 弩炮
- 2 Daring Dane 高空歷奇旅程
- 3 De-Esteeayliser 凌空車胎陣
- 4 High Force Shower 高速花洒
- 5 Land Yacht 陸地帆船
- 6 Long Range Bolt Shooter 長程射矢器
- 7 Roman Ballista Mark IV 羅馬四型發炮架
- 8 Rough Riders 癲馬
- 9 Secret Weapon 秘密武器
- 10 Tight Rope 單索橋
- 11 Water Chute 滑水道
- 12 Counter-Balance Gate 墜重營門
- 13 Long Range Shower 長程花灑
- 14 The Star Of David Gateway 大衛星營門
- 15 Suspended Flag Pole 凌空旗桿
- 16 Treadmill/Humane Treadmill 臥踩水車

Category C -- C 級工程項目

(A) Tower and Height 高台、起重工程和高空事工

- 1 Beacon Tower 烽火台
- 2 Brynbach Tower 三角形瞭望台
- 3 Corkscrew Tower 倒轉三角高台
- 4 Crow's Nest 桅杆瞭望台
- 5 Dan Bread Tower 丹白特台架
- 6 Pyramid Tower / Hourglass Tower 金字塔瞭望台
- 7 Rustic Tower & Double Lock Trestle 鄉間高台及雙鎖支架橋
- 8 Signal Tower 有蓋訊號台
- 9 Treacher's Folly 攀爬練習台
- 10 Tree-top House 樹頂屋

(B) Bridge and Crossing 橋樑和橫越工具

- 1 Double Transporter Ladder Bridge 雙支架梯橋
- 2 Lofted Bridge 高索橋
- 3 Monkey Bridge 猴子橋
- 4 Pylon Bridge /Senior Bridge 多橋塔橋
- 5 Rocker Bridge 搖臂橋
- 6 Seine Bridge 圍網橋
- 7 Aerial Runway 空中滑車
- 8 Tassie 浮橋
- 9 Winched Runway 空中絞動滑車

(C) Raft 浮筏

- 1 Decked Raft 甲板浮筏
- 2 Oil Drum Raft Mark I 油桶浮筏一型
- 3 Oil Drum Raft Mark II (with Sail) 油桶浮筏二型(連帆)
- 4 Paddle Steamer Raft 踩板氣船
- 5 The Thing (Paddling Bicycle) 水上腳踏車

(D) Fun and Game 遊樂設施

- 1 Cambridge Merry-Go-Round 劍橋旋轉台
- 2 Luxembourger 盧森堡旋轉輪
- 3 Swing Boat 蹺蹺板架
- 4 Trapeze 高鞦韆台連網架

Campfire Song List 營火歌曲名單

(1) 中文歌曲 (以字數及筆劃為序)

<u>編號 No</u>	<u>歌名 Song Title</u>	<u>編號 No</u>	<u>歌名 Song Title</u>
1.	蕭	32.	送行歌
2.	山歌	33.	高山青
3.	竹舞	34.	得意歌
4.	朋友	35.	惜別歌
5.	晚禱	36.	採蓮謠
6.	綠寶	37.	晚禱歌
7.	邁進	38.	毫子歌
8.	驢歌	39.	猜拳歌
9.	叉燒飽	40.	野營歌
10.	大水牛	41.	野獸歌
11.	大激賞	42.	鳥卒卒
12.	大頭仔	43.	博愛歌
13.	小老鼠	44.	童年樂
14.	友共情	45.	童軍頌
15.	月光光	46.	童軍樂
16.	水仙花	47.	開火車
17.	牛腩麵	48.	飲汽水
18.	再會歌	49.	傻大姐
19.	老木頭	50.	搖船曲
20.	快樂歌	51.	當年情
21.	來唱歌	52.	團結歌
22.	夜香郎	53.	數字歌 (2343423 · 帝女花)
23.	炒冷飯	54.	數字歌 (40342 · 昭君出塞)
24.	阿里郎	55.	潑水歌
25.	食雲吞	56.	請安歌
26.	峇里島	57.	整天叫
27.	哨牙歌	58.	糖不用
28.	捕魚歌	59.	營火頌
29.	捉螃蟹	60.	營火歌
30.	真論盡	61.	臨歧頌
31.	茶壺歌	62.	霧之歌

<u>編號 No</u>	<u>歌名 Song Title</u>	<u>編號 No</u>	<u>歌名 Song Title</u>
63.	櫻花開	99.	鳳陽花鼓
64.	爛鬮豬	100.	一個人跳舞
65.	歡迎歌	101.	一個耕田佬
66.	聽啊！聽！	102.	三隻盲老鼠
67.	讀書郎	103.	世界真細小
68.	千禧營歌	104.	加多一把柴
69.	小小姑娘	105.	可愛的黃昏
70.	小小翠鳥	106.	母鴨帶小鴨
71.	山谷回聲	107.	光榮繼續來
72.	今天開始	108.	老豆多仔公
73.	友誼之光	109.	低微的聲音
74.	友誼萬歲	110.	我們唱得好
75.	少年的我	111.	男兒當自強
76.	日行一善	112.	星仔走天涯
77.	王老先生	113.	香港童軍歌
78.	打開蚊帳	114.	神秘的森林
79.	壯志驕陽	115.	發開口夢歌
80.	我愛露營	116.	童軍規律歌
81.	沙里洪巴	117.	童軍進行曲
82.	夜半歌聲	118.	童軍誓詞頌
83.	幸福家園	119.	運動樂趣多
84.	金山亞伯	120.	團結創高峰
85.	青春舞曲	121.	齊齊望過去
86.	青蔥歲月	122.	齊邁進大同
87.	勇敢童軍	123.	小童軍進行曲
88.	草原情歌	124.	山谷裡有田莊
89.	康定情歌	125.	在森林和原野
90.	童軍精神	126.	我地香港童軍
91.	獅子山下	127.	我來唱一首歌
92.	當你快樂	128.	問題天天都多
93.	踏雪尋梅	129.	新馬來亞情歌
94.	錦繡前程	130.	夢中回到洞梓
95.	營火熊熊	131.	一隻小狼一條尾
96.	營火舉起	132.	小丸子妙想天開
97.	鹹魚臘腸	133.	山歌不唱忘記多
98.	歡笑同樂	134.	有隻雀仔跌落水

<u>編號 No</u>	<u>歌名 Song Title</u>	<u>編號 No</u>	<u>歌名 Song Title</u>
135.	我係一隻千腳蟲	143.	Ho La Hi
136.	青蛙媽媽睡醒了	144.	I Q 博士
137.	當我們同在一起	145.	It's A Long Way 去灣仔波地
138.	頭肩膝頭腳趾公	146.	Pack! Pack! Pack!
139.	天下壹家 眾口壹誓		
140.	手指、手指公郁郁貢		
141.	BB 保你大		
142.	Good-Bye 記得我		

(2) English and International Titles (in alphabetical order)

<u>No 編號</u>	<u>Song Title 歌名</u>	<u>No 編號</u>	<u>Song Title 歌名</u>
147.	A Big Carabao	171.	By the Blazing Council Fire's Light
148.	A Pizza Hut	172.	Camfire Opening (Sussex)
149.	A Ram Sam Sam	173.	Camp Camp Camp
150.	Ah Chong Sok	174.	Camp Song
151.	All You Hungry People	175.	Campfire Burning
152.	Alleluia	176.	Chai Da Mud
153.	Alouette	177.	Chan Mali Chan
154.	Amazing Grace	178.	Chap Chap Maleh (泰國民歌)
155.	Are You Sleeping	179.	Chi-Ba-Ba
156.	Around the Campfire Bright	180.	Clementine
157.	A-Roving	181.	Coconut
158.	Auld Lang Syne	182.	Come and Sing with Me
159.	Back to Gilwell-1	183.	Cubbing
160.	Back to Gilwell-2	184.	Daisy, Daisy
161.	Bahasa Inggeris	185.	Dancing La-Ba-Do
162.	Bahasa Melayu	186.	Deep and Wide
163.	Batak Batak	187.	Deep Deep Kar Lay
164.	Be Prepared	188.	Dero Song
165.	Bingo	189.	Disini Senang
166.	Blowing in the wind	190.	Do Re Me
167.	Boom-Chick-A-Boom	191.	Do You Know the Fragrant Smell
168.	Bravo Bravissimo	192.	Do Your Ears Hang Low
169.	Burung Kakatua	193.	Donna Donna

<u>No 編號</u>	<u>Song Title 歌名</u>	<u>No 編號</u>	<u>Song Title 歌名</u>
194.	Down By the Banks of Yara	228.	Hong Kong Scout Song
195.	Down In The Valley	229.	Hong Kong Scouting
196.	Drinks	230.	Humpty Dumpty
197.	Dum	231.	I Love the Mountain
198.	Edelweiss	232.	If There's Any Trouble Just You Smile
199.	Een Gonyama	233.	If You're Happy
200.	Embers of Campfire	234.	Imsey Wimsey Spider
201.	Epoh E Tai Tai	235.	In My Dreams I'm Going Back to Gilwell
202.	Everybody Loves Saturday Night	236.	I've Been Working On the Railroad
203.	Father Abraham	237.	I've Got Sixpence
204.	Five Hundred Miles	238.	I've got the B-P Spirit
205.	Flee Fly Flow	239.	Jamaica Farewell
206.	For He's a Jolly Good Fellow	240.	Jamboree
207.	Found the Peanut	241.	John Brown's Body
208.	From Out the Battered Elm Tree	242.	Jolly Good Company
209.	Gee Gayamu Gayamu	243.	Kee Lee Kap
210.	Ging Gang Goo	244.	Keep the Campfire Burning
211.	Going Down The Valley	245.	Keep the Home Fires Burning
212.	Golden Jubilee Jamboree Song	246.	Kille Kille
213.	Grace Song	247.	Killi Killi Watch Watch
214.	Grasshopper We We We	248.	Kookaburra
215.	Green Grow the Rushes Ho	249.	Kumbayah
216.	Gu Choki Pa	250.	Land of the Silver Birch
217.	Hail, Hail the Gang's All Here	251.	Lemon Tree
218.	Happy Wanderer	252.	Leron Leron Sinta
219.	Havanacatora	253.	Ling Bo Ling Wa Wa
220.	Have You Ever Ever	254.	Little Tom Tinker
221.	Head and Shoulders, Knees and Toes	255.	Loch Lomond
222.	Heidi	256.	Loo Be Lou
223.	Hello! Hello!	257.	Love Grows Under the Wild Oak Tree
224.	Hey Jum Bo Hay	258.	Lula Ley
225.	Hi Ho! Nobody Home	259.	Magic Penny
226.	Hoki Toki (Eskimo song)	260.	Make New Friends
227.	Home On The Range	261.	March, March, March

<u>No 編號</u>	<u>Song Title 歌名</u>	<u>No 編號</u>	<u>Song Title 歌名</u>
262.	Maori Stick Song	297.	Puff, the Magic Dragon
263.	Masa Bili	298.	Put Your Left Foot In
264.	Merrily, Merrily Greet The Morn	299.	Quick to the Call
265.	Michael	300.	Rasa Sayang
266.	Mor-Per-Le	301.	Red River Valley-1
267.	Mo-Si Mo-Si	302.	Red River Valley-2
268.	Mowgli's Hunting	303.	Roga Mehela
269.	Music Man	304.	Rosen Fra Funn
270.	Music Shall Live	305.	Row, Row, Row Your Boat
271.	My Bonnie	306.	Sakura
272.	My Grandfather's Clock	307.	Santa Lucia
273.	My Hat it has Three Corners	308.	Sarasponda
274.	Nona Manis	309.	Scout Hymn
275.	Now Is the Hour	310.	Scouting Marches On
276.	O Wa-la Wa-la	311.	Scouting Trail
277.	O Wonnie Wonnie	312.	Scouts' Goodnight Song
278.	Oh How Lovely Is the Evening	313.	Seven Steps
279.	Oh No John	314.	Shalom
280.	Oh, Susanna	315.	She Wore A Yellow Ribbon
281.	Oh What A Lovely Song	316.	She'll Be Coming Round the Mountain
282.	Old MacDonald Had A Farm	317.	Shi A Wa Sa Na Na Te O Ta Ta Ko
283.	On My Honour	318.	Sing Everyone Sing
284.	On Top of Old Smoky	319.	Sing Sing Sing
285.	One Day When We Were Young	320.	Sing Sing Together
286.	One Elephant	321.	Skip To My Lou
287.	One Finger One Thumb	322.	Smiles
288.	One Man Went to Mow	323.	Softly Sings the Donkey
289.	Our Boys Will Shine Tonight	324.	Softly Falls the Light of Day
290.	Our Scouts Are Marching On	325.	Suitors
291.	Pack Up Your Troubles	326.	Swedish Fire Song
292.	Patrol Camp Song	327.	Taps
293.	Penny Penny	328.	Ten Green Bottles
294.	Pigiya Baba	329.	Tenting on the Old Camp Ground
295.	Pik Pil La Le	330.	The Ants Go Marching
296.	Pretty Little Girl and Handsome Boy	331.	The Drunken Sailor

<u>No 編號</u>	<u>Song Title 歌名</u>	<u>No 編號</u>	<u>Song Title 歌名</u>
332.	The Farmer In the Field	357.	We Are Here Again
333.	The More We Get Together	358.	We Are Table Number One
334.	The Muffin Man	359.	We Are The Red Men
335.	The Ping Pong Ball	360.	We Shall Overcome
336.	The Quartermaster's Store	361.	We're All Together Again
337.	The Spirit Lives On Beyond 2000	362.	We're On The Scouting Trail
338.	The Whole World In His Hands	363.	We're On The Trail
339.	The Zulu Warrior	364.	What Shall We Do with A Drunken Sailor
340.	This Is My Little Scouting Light	365.	Whatever Will Be, Will Be
341.	This Old Man	366.	When the Saints Go Marching In
342.	Three Blind Mice	367.	When You're Happy
343.	Three Little Ducks	368.	Where Have All the Flowers Gone
344.	Till We Meet Again	369.	Where is Thumbing
345.	Tipperary	370.	With the Scent of Wood Smoke
346.	T.I.R.O.	371.	Yellow Bird
347.	Top of the World	372.	Yipi Yaya
348.	Tra La La	373.	You Are My Sunshine
349.	Tramp! Tramp! Tramp!	374.	Youth Is Calling
350.	Trek Cart Song	375.	Zum Ba
351.	Tum Ba	376.	Zum Gali Gali
352.	Twinkle, Twinkle, Little Star		
353.	Under The Spreading Chestnut Tree		
354.	Vini Vini		
355.	Vive L'amour		
356.	Waltzing Matilda		

註：營火歌曲名單，要與時並進。因此，歡迎營火領袖不時推薦適合在營火會唱的歌曲加進名單內。

Note: The above list is not closed. Additions may be made on recommendation of Campfire Leaders.