

CHAPTER 1 RULES AND REGULATIONS

GENERAL

101. SCOPE

1. This Chapter contains the regulations governing the conduct of CAF diving operations, exercises and training. These regulations, which have evolved from long diving experience, are applicable to all CAF diving personnel and to civilian divers employed by the Department of National Defence (DND). Any person who acts on behalf of the employer (CO and therefore the CAF) is responsible under the code for the health and safety of all persons (including civilian diving contractors) granted access to the work place, in this case a CAF dive site.

2. These regulations are mandatory and are intended to ensure both the safety of the diver and the efficiency of diving operations. In emergencies or operations during hostilities, and during training for specific hazardous missions, calculated risks may have to be taken. Commanding Officers will have to weigh these risks against the consequence of failure to complete the task. Commanding Officers are to ensure that only justifiable deviations from these regulations are permitted.

3. All personnel concerned with diving shall make themselves thoroughly conversant with these regulations, strict compliance with which is essential to ensuring the safety of the diver. Each article of this manual shall be read in its entirety, in order for the full context to be understood. Many articles must be read in conjunction with other articles or sections, in order for their full context to be understood. Portions of text within articles are not to be read or applied selectively.

4. The successful completion of a diving operation is dependent on careful attention to detail. Investigation of diving accidents has shown that the diver or Supervisor who habitually ignores details will eventually come to grief.

5. Local Standard Operating Procedures should be developed for particular types of diving operations that are carried out repeatedly. Refer to Chapters 5 and 6 for additional guidance. SOP's for Combat divers are detailed in publication B-GL-361-007/FP-001. SOP's for SAR Divers are detailed in SMM 60-STP-1000-SAR TECH SMM.

102. ANNEXES AND INDEXES

1. Definitions, abbreviations and acronyms applicable to diving in the CAF are found at Chapter 1, Annex B. These must be read in conjunction with the respective articles.

2. Additional orders and references pertaining to CAF diving are found at Chapter 1, Annex C.

3. An Alphabetical Index may be found at the back of this Volume.

DIVING RESPONSIBILITIES

103. ADMINISTRATION

1. CAF Diving DAODs prescribes the organization, authorities and responsibilities related to all diving matters within Units, Formations and National Defence Headquarters (NDHQ).
2. CAF Diving OPIs and OCIs
 - a. Directorate of Diving Safety (D DIVE S) is an NDHQ Directorate and is the diving safety regulatory authority. D DIVE S issues the Diving Manuals and DGMS under authority of the CDS. D DIVE S is the office of prime interest (OPI) for:
 - (1) All CAF diving policy; D DIVE S also chairs the CAF Diving Effectiveness Steering Group (CAFDESG) which ensures that all matters concerning CAF diving are addressed in a common forum and that CAF diving policy is supported as necessary by the relevant OPIs and OCIs listed in the article;
 - (2) CAF diving safety policy, including manuals and training procedures;
 - (3) Safety inspections of all CAF Diving Teams and Units; and
 - (4) Investigation of diving incidents/accidents.
3. Outlined in CAF Diving DAODs, Fleet Diving Units (Atlantic and Pacific) are responsible for the training of Clearance, SAR Tech, Ship's and Port Inspection Divers. CFSME is responsible for the training of Combat divers.
4. The operational units will follow the normal chain of command. The Formation OPIs are Senior Staff Officer Diving and Mine Warfare in MARLANT and Commanding Officer Fleet Diving Unit (Pacific), the SSO SAR Tech 1 Canadian Air Division Winnipeg and the Commandant of CFSME, CFB Gaagetown. The Commander Naval Reserve Headquarters is the OIC for Port Inspection Divers (PID).

OPI CAF Diving Safety Policy	Director Diving Safety (D Dive S)
OPI for Naval Diving Operational Policy	Director Naval Force Readiness (NFR)
OPI for Search and Rescue (SAR) Technicians	1 CAD HQ/Staff Officer SAR Technicians (SSO SAR Tech)
OPI for Combat Divers	Commandant CAF School of Military Engineering (CFSME)
OPI for Port Inspection Divers (PID)	Commander Naval Reserve Headquarters (NAVRES HQ//SSO DIVE)
Within NDHQ, OPI/design authority for CAF diving systems and equipment	Director Maritime Equipment Program Management (DMEPM)
Within NDHQ, OPI for diving equipment requirements	Director Naval Requirements (DNR)
Within NDHQ, OPI for CAF Diving Medical Standards and Policy	C Navy RCN Surgeon
OPI for CAF Diving Medicine	CDHM at DRDC - Toronto

Figure 1-1 OPI

104. COMMANDING OFFICER

1. The Commanding Officer shall ensure that time and resources are made available for the proper training and exercise of all divers under his or her command. The CO may delegate authority for the detailed administration of diving matters and the conduct of diving operations to subordinate officers, but such delegation shall in no way relieve the CO of overall responsibility for the safety, well-being and efficiency of diving personnel.
2. The member delegated by the CO to be the Diving Officer should be selected from those members with an appropriate qualification as listed below:
 - a. Clearance Diving Officer (CLDO);
 - b. Clearance Diver (CD) QL 6B;
 - c. Ship's Dive Supervisor (SDS);
 - d. Combat Diving Supervisor (CBTS), DP3B and above;
 - e. SAR Tech Leader (STL); and
 - f. Port Inspection Diver (PID) QL 4 PO 1 or above.

If no officer with a diving qualification is available then an appropriate alternate may be delegated as laid down in Article 106.

105. DIVING OFFICER

1. The Diving Officer is responsible to the Commanding Officer for :
 - a. The proficiency of all diving personnel on the team;

- b. The organization and preparation of all diving operations carried out under the Diving Officer's direction;
- c. Scheduling of exercises and training for personnel in order to maintain proficiency;
- d. Maintenance of all diving records;
- e. Scheduling the maintenance of diving equipment in accordance with current technical instructions; and
- f. Briefing the Diving Supervisor(s).

106. DIVING SUPERVISOR

1. All diving operations shall be carried out under the direct supervision of a fully qualified and current Diving Supervisor who is trained in the equipment being used (see Figure 1-1), except as described at paragraph 3.
2. The Diving Supervisor shall be in full charge of the diving team. The Diving Supervisor must be continuously at the scene of the diving operation and must not enter the water or hyperbaric chamber unless properly relieved by another qualified Supervisor.
3. Where none of the supervisory personnel listed in Figure 1-1 are available, only emergency diving operations may be conducted. They shall be carried out under the supervision of the Commanding Officer or an officer delegated in writing. The advice of the most experienced diver present should be heeded.
4. The Diving Supervisor is to be fully conversant with the objectives and requirements of the task undertaken.
5. The Diving Supervisor is responsible for ensuring:
 - a. The safety of all members of the diving team;
 - b. That at least the minimum permitted number of qualified divers, as laid down in Article 120, are present at the site for the duration of the tasks;
 - c. That each member of the team is fully briefed on the objectives and requirements of the task;
 - d. That the diving operation is conducted in strict compliance with diving regulations;
 - e. That an accurate record of every dive is maintained;
 - f. Equipment is authorized and up-to-date; and
 - g. Personal dive logs are current with regards to medical, dental examination, physical fitness and dive currencies.

6. Commanding Officer may authorize in writing a medically unfit and no longer current dive supervisor, provided that the supervisor is qualified on the equipment supervised and that their medical condition does not prevent them from carrying out their duties. This authorization shall be reviewed and annotated on the commanding officers review page annually.

107. DIVER

1. In order to carry out diving duties successfully and safely, every diver shall maintain a high standard of physical fitness IAW current CAF Diving DAODs.

2. If a diver becomes ill, the diver shall report to a Medical Officer, shall inform the Diving Officer and shall not dive until medically cleared to do so.

3. Article 117 gives a detailed explanation of the level of proficiency/currency required of each diver. All CAF divers dive only as a part of a CAF diving team, unless under instruction. Divers are not to be considered self-contained operators capable of being reassigned into teams at short notice, since the safety of each diver is enabled through the stability and integrity of each CAF team. For example, the Diving Officer and Supervisor must know the status, capability and any limitations of each team member when planning and executing every dive. Divers on loan are an exception to this Article, as dealt with in Article 111.

4. All techniques and procedures utilized by individual divers have been developed within the concept of a CAF diving team. The CAF diving team is the basic organizational element upon which safe and effective diving relies. Accordingly, CAF divers are to be exercised and operated as team members, since they are neither trained nor equipped to be deployed as self-sufficient individuals. Refer to Article 111 concerning divers on loan, which is to be the exception rather than the rule in CAF diving.

108. STANDBY DIVER

1. Whenever diving operations are in progress, a standby diver is required at the surface at a specified state of readiness. Standby diver equipment shall be prepared and tested before any diving takes place. Diving Officers and Supervisors will not appoint standby divers who are unfit for diving.

2. The Diving Supervisor specifies the required state of readiness of the standby diver. There are two states of Standby Diver readiness:

- a. **Immediate Notice.** Diver is fully dressed and ready for the water with the exception of the facemask/ mouthpiece; and
- b. **Ready.** Diver is fully dressed with the exception of fins, air cylinder(s) and facemask/mouthpiece, all of which must be within reach.

3. The standby diver shall be:

- a. Current and in-date (refer to Article 117);

- b. Equipped with a redundant second stage regulator; and
 - c. Qualified to the maximum depth anticipated for each specific task.
4. Except when diving in a pool, the standby diver is always to dive on a lifeline as an "attended diver."
5. The standby diver is to be at IMMEDIATE NOTICE in the following circumstances:
 - a. When diving under hazardous conditions, e.g. ice diving, wreck diving, at night or during restricted visibility;
 - b. When tidal streams or currents are stronger than 0.5 knots;
 - c. When free-swimming is taking place IAW Article 122 and 123;
 - d. Whenever the Diving Supervisor considers it likely that the diver may require assistance;
 - e. During all initial diver training; and
 - f. When diving operations exceed 30 msw in depth.

109. DIVING ATTENDANTS (TENDERS)

1. When diving with Surface Supply Diving System or swimming in CABA equipment on a lifeline, it is preferable that the diver be tended physically or visually by a diver who is qualified and current in the apparatus being used. An attendant continuously keeps in hand the diver's lifeline or umbilical or continuously watches the diver's float or marker.
 - a. Article 506 outlines the attendant's duties when diving on a lifeline; and
 - b. In diving training units, personnel under instruction may act as attendants.
2. At the supervisor's discretion, personnel not qualified in diving may be employed as attendants. Such non-diver attendants should be military personnel who possess a good sense of responsibility and the mental ability to discharge their duties efficiently and reliably. These individuals should be noted on the Diving Supervisor's Log Sheet.
 - a. They must be fully conversant with all duties of a qualified diver when acting as an attendant and be aware of the nature of the diving task in which they are involved, and having passed the diving signal exam; and
 - b. They should be exercised with the diving team IAW the levels of proficiency stated in Article 117.

110. RESCUE SWIMMING

1. CAF divers may be required to perform Rescue Swimmer duties. Rescue Swimmers may be deployed from ships, small boats and aircraft to render assistance to personnel in the water (e.g. man overboard or downed aircraft).
2. The Rescue Swimmer shall be:
 - a. Instructed in the performance of required duties and fully understand them;
 - b. A strong swimmer and highly motivated;
 - c. Positively buoyant wearing a wetsuit, dry suit, or rescue swimmer suit. In tropical waters, if no suit is worn, a PFD shall be worn;
 - d. Highly visible (an indicating light shall be worn at night and international orange hood may be worn by day); and
 - e. Shall carry a quick-release safety knife.

111. DIVERS ON LOAN

1. When divers are loaned between teams, units or ships, the loaning Diving Officer/Supervisor is responsible for ensuring that the diver is in all respects qualified and fit to carry out the tasks for which the diver is being loaned and that any equipment taken by the diver is in proper working order.
2. The gaining unit is to fully inform the loaning unit as to the nature of the task the diver is to perform and is fully responsible for the safety of the diver during the period of the loan.
3. Instructions for the recording of a loaned diver's activity are set out in Article 155.
4. CAF Divers joining allied nations' dive teams outside of formal exchange agreements shall follow the direction in Article 112 prior to leaving Canada.

112. ALLIED DIVERS DIVING WITH THE CAF

1. In order for military divers from allied nations to dive with the CAF, under CAF regulations and in CAF diving equipment, specific preparations and authorization are required. Such diving enables exchange of information for identified and agreed military objectives and in some cases will permit allied personnel to retain their foreign diving qualification while serving in Canada.
 - a. This Article does not apply to experimental diving at EDU or to foreign military personnel posted to specific CAF diving organizational positions under the military Personnel Exchange Program, who serve and dive under terms of reference set out in formal exchange agreements.
2. Because of the numerous variants of diving systems among allied nations, it is essential to safety that qualified foreign military divers be formally familiarized in CAF diving equipment and procedures prior to diving.

3. CAF divers shall supervise such dives and fill all essential diving team positions IAW the applicable Article and Volume of the Diving Manual on Minimum Personnel Requirements. Allied divers shall act only as divers and general assistants.
4. The CO of any CAF diving team may request to host and conduct allied dives IAW the requirements below. Formation authorization to proceed shall only be granted after the following has been completed:
 - a. The CO of the host unit must have received written authorization from the CO of the allied Unit, Team or individual divers involved, permitting them to dive under CAF regulations using CAF diving equipment, including the following information:
 - b. Reason for the request, e.g. information exchange, qualification maintenance or duty,
 - c. Confirmation that the divers are considered to be on duty while conducting such allied dives,
 - d. Participant information including:
 - (1) Full service identification info;
 - (2) Equipment qualifications;
 - (3) Level and type of diving qualification; and
 - (4) Confirmation of medical fitness to dive and currency.
5. The host Unit CO shall provide the following additional details when seeking formation authorization to proceed:
 - a. The type of CAF equipment to be used - based on comparability to allied military equipment identified at paragraph 4.d;
 - b. The type of diving to be conducted - based on comparability to level of training and qualifications identified at paragraph 4.d.;
 - c. Identification of diving equipment and procedural differences having a safety impact and how these will be mitigated;
 - d. An outline of the formal familiarization package intended, and
 - e. Start and end dates for which authorization is sought.
6. Where practical, existing CAF diving training documentation should be used as the basis for the formal familiarization package.

7. All formal familiarization training must be conducted in a controlled environment such as classroom for dry training and a pool or camber for wet training.
8. All dives conducted under this article shall be entered in the allied diver's logbook and annotated as a "CAF Dive".
9. Brief details of the formal familiarization package details shall also be entered in the allied diver's logbook, with reference to the documentation raised at paragraphs 4 and 5.
10. Copies of all documentation are to be kept on local files at the host unit, the authorizing formation and also may be provided to the allied divers as required by them.

SELECTION AND QUALIFICATION**113. GENERAL**

1. Care must be taken in the selection and recommendation of suitable volunteer candidates. Divers underwater and on the surface are subject to many hazards. Because they may work alone or in pairs, they must have self-confidence and a strong sense of responsibility. They must be capable, reliable, demonstrate a high degree of professionalism, and must maintain the CAF standard of physical fitness.

114. CLASSIFICATION OF DIVERS

1. Full details and selection, qualifications and conditions of service are contained in Command Orders A-PD-055-001/AG-001. Any additional information required, such as particulars of syllabi, can be obtained by contacting the Commanding Officers of FDU(A), FDU(P) and CFSME.

115. COMBAT DIVER SELECTION

1. Cbt Engineer units conducting pre-selection of candidates shall ensure the following action / steps and requirements are taken before any diving can take place with new potential diving candidates.
2. An ADC representative, qualified AHNX, must be present on site to maintain standards and ensure that EO 001.03 para. 4a of A-PJ-002-DST/PH-H-01 Cbt Diver Training Plan is followed.
3. The Dive Supervisor shall ensure the candidates have the shallow water diver medical screening form signed by the appropriate dive medical officers.
4. Dive teams shall ensure that a local (on base) ADMO / ADMT is available during training and is aware of the intended training plan.
5. Dives shall be conducted only in a controlled environment (i.e. Pool). Open water/river/lake assessments are not authorized.
6. The preliminary pool testing shall be conducted only when an RCC can be reached within 4 hrs of road travel time.
7. The RCC shall be notified and online before beginning any pool testing.
8. The Dive Supervisor shall confirm travel time and method of transportation between pool and RCC prior to commencing training.
9. A fully qualified and proficient Standby Diver shall be at immediate state when Cbt Diver candidates are in-water.
10. 1:1 instructor / candidate ratio must be maintained throughout the assessment while candidates are in-water.

116. ISSUE OF DIVING EQUIPMENT

1. On successful completion of the appropriate qualification course the diver shall be issued diving equipment IAW CAF Scale D01-312.
2. Diving team equipment and entitlements are listed in CAF Equipment Checklists (ECLs) available on the D Dive S SharePoint Page.

117. CURRENCY AND PROFICIENCY OF DIVERS

1. The importance of regular exercise for divers cannot be over-emphasized. Unpracticed divers are a danger to themselves and to others. CABA divers CoC must ensure that their divers are provided with every opportunity to exercise underwater as frequently as conditions will allow.

2. Sub-occupational CAF divers must dive every 90 days to remain current.

3. To be considered proficient in CABA, a diver must conduct a minimum of one dive and participate in at least six dive cycles during the 90-day period.

4. When more than one cycle is conducted in one day for the purposes of proficiency training, it is required that team personnel rotate throughout various positions in each diving cycle to maximize the training and proficiency benefit. All units are encouraged to maximize diver in-water time.

5. Pool diving for currency or proficiency is detailed at Article 146.

6. The attention of officers in charge of diving teams is directed to their operational commander's orders on level of practice and proficiency required of their divers and diving teams. These may set standards that exceed the minimum level.

7. For a diving team to be considered worked up, all dive team members must complete dives practicing their underwater skill sets or dive supervisor duties on a regular basis.

8. For SAR Tech's to remain operationally current they shall:

a. Participate in two (2) diving exercises per calendar year I.E. one Jan to end June and the second July to Dec;

b. Each exercise to include six (6) open water dives and six (6) dive cycles. Each cycle to include the opportunity for each diver to fulfill positions of Dive Supervisor, STBY Diver, Tender and/or Boat Operator. In the event an exercise incurs arising/unforeseen circumstance(s) that preclude(s) the diver(s) from meeting all objectives of the exercises. Missed objectives shall be completed no later than the last day of the six (6) month timeframe (Jan-June and July-Dec). Any objective not met/maintained must be addressed by SARSET;

- c. Complete two (2) CABA entries (CABA Lite not to be used) (continuation Trg) within each 6 month time frame;
 - d. Pool dives are acceptable as an alternate means in which to maintain currency; and
 - e. All operational SAR Techs to conduct a Biennial (every two years) Proficiency check.
9. For Clearance and Port Inspection divers, when CABA dives are to be performed below 30 msw, supervisors must ensure the following pre-requisites are met:
- a. Establish calculations relating to gas endurance;
 - b. Establish contingency plans for in-water emergencies;
 - c. Conduct a team table top exercise to review lazy shot procedures, anticipated gas usage, emergency procedures as well as to highlight the effects of nitrogen narcosis; and
 - d. Conduct a progressive work-up to depth, to include EP's. This must be done prior reaching maximum depth of the planned dive.

Qualification	Equipment	Diving Limits	Supervisory Limits
Clearance Diving Officer/ PO2 QL6B and above	CABA/ULSSDS	45 msw ^{1,2,4}	45 msw ³
Clearance Diver PO2 QL6A	CABA/ULSSDS	45 msw ^{1,2,4}	45 msw ³
Clearance Diver MS/LS QL5B	CABA/ULSSDS	45 msw ^{1,2,4}	30 msw ⁵
Clearance Diver AB/LS QL5A	CABA/ULSSDS	45 msw ^{1,2,4}	No Qualification
Port Inspection Diver QL4 and PO2 QL3	CABA/ULSSDS	45 msw ^{1,2,4}	45 msw ³
Port Inspection Diver MS QL3	CABA/ULSSDS	45 msw ^{1,2,4}	30 msw ⁵
Port Inspection Diver QL2	CABA/ULSSDS	45 msw ^{1,2,4}	No Qualification
Port Inspection Diver QL1 Mod 2	CABA/ULSSDS	30 msw ^{1, 5}	No Qualification
Port Inspection Diver QL1 Mod 1	CABA	30 msw ^{1, 5, 6}	No Qualification
Combat Diver Supervisor	CABA/ULSSDS	30 msw ^{1, 5, 6}	30 msw ^{5, 6}
Combat Diver	CABA/ULSSDS	30 msw ^{1, 5, 6}	No Qualification
SAR Tech Diving Supervisor	CABA/ULSSDS	30 msw ^{1, 5, 6}	30 msw ^{5, 6}
SAR Tech QL5A	CABA/ULSSDS	30 msw ^{1, 5, 6}	No Qualification
Ship's Diver Supervisor	CABA	30 msw ^{1, 5, 6}	30 msw ^{5, 6}
Ship's Diver	CABA	30 msw ^{1, 5, 6}	No Qualification

NOTES

1. CABA float/lifeline diving permitted for working dives between 0-30msw.
2. CABA on lifeline only permitted for inspection dives between 30-45msw.
3. Supervisor shall obtain CO's written authorization for CABA working dives between 30-45 msw.
4. For depth exceptions refer to Article 123. (Applies to CABA only)
5. No-decompression dives only.
6. CO's authorization required for dives deeper than 15 msw.

Figure I-2 CAF Diver Operating Limits

118. RESCINDING QUALIFICATIONS

1. The CO will rescind a diver's subspecialist qualifications if the diver:
 - a. Fails to attend divers Re-Certification training within three years;
 - b. Has not been medically examined IAW CFHS Order 4000-04, Shallow Water Divers Periodic Health Assessment and Medical Administration Instruction;
 - c. Fails to meet the CAF Divers' Fitness Standard;
 - d. **Does not dive in two years;** or
 - e. Refuses to dive and is not clinically unfit.

2. Circumstances such as injury, deployment or extended coursing may preclude the diver from attending the CAF Diver Re-Certification Course IAW paragraph 1.a of this Article. In such cases the Commanding Officer shall request a waiver of the requirement to rescind the diver's qualification from their appropriate command diving authority as follows:
 - a. CFSME/ADC;
 - b. PID SSO DIVE;
 - c. FDU (P)/CO; and
 - d. FDU (A)/CO.

3. All requests shall be fully substantiated and include recommendations. Waivers may be requested for any time period up to a maximum of one year from the end date of the diving qualification.

4. Commanding Officers have the authority to rescind a diver's qualification after appropriate investigation and documentation of grounds, such as sub-standard performance or unsuitability for employment in diving.

5. Upon rescinding a diver the Commanding Officer will:
 - a. Annotate in red ink "Rescinded Diver" on the qualification page of the personal dive log (CF 849), sign and date this annotation and repeat this annotation again immediately after the last entry in the diver's log; and
 - b. Ensure details surrounding the decision to rescind the diver are clearly documented in the member's personnel file.

119. SUSPENDING DIVING QUALIFICATION – CBT/SHIPS DIVER

1. When a diver has failed to exercise for a 90-day period, the Commanding Officer shall suspend the diver from future diving:
 - a. The Commanding Officer shall annotate in red ink "Suspended Diver" immediately after the dive last entry in the diver's log (CF 849); and
 - b. Ensure the remarks column of Unit Team Roster on CAFDITS is updated to "Suspended Diver".
2. When a diver is suspended, the diver must undergo a thorough in water assessment prior to resuming full diving duties. This check-out dive shall be conducted by a qualified and current Dive Supervisor.
3. The actions required to lift the suspension of a diver and regain his currency are detailed in Figure 1-3.
4. The check-out dive must be annotated in the CF 849/CAFDITS on the next record of diving operations entry as follows:
 - a. Date;
 - b. Location;
 - c. Applicable actions list (A or B) IAW Figure 1-3;
 - d. Result of the check-out dive (including emergency procedures); and
 - e. Dive supervisor signature.
5. Check out dives shall be conducted only when the specified conditions listed below have been satisfied:
 - a. Before the dive, the diver shall complete all non-diving portions IAW Figure 1-3, (including assessment of diving supervision skills if appropriate), Refer to Annex 1D for check out dive criteria;
 - b. The Diving Officer or senior diver shall confirm that the diver is in date for medical, dental, and physical fitness tests;
 - c. The CO shall be informed of the check-out dive;
 - d. The check-out dive shall be conducted under safe and controlled environmental conditions, such that both rescue and treatment can be rapidly affected. In general such dives should be conducted in a camber, a safe jetty/boat launching area, other sheltered area or a designated diving training area;

- e. Either a qualified and current dive supervisor or if necessary a Clearance Diver supervisor, shall conduct the assessment;
 - f. The diver shall be tended on a lifeline unless the dive is conducted in a swimming pool;
 - g. The standby diver shall be at **IMMEDIATE NOTICE**.
6. The Commanding Officer shall sign the check-out dive form, an example of this form can found in Annex D. For all suspended divers, use the PDF version found on D Dive S SharePoint at: [Check-Out Dive Form](#). The checkout dive form shall be retained by the unit for the duration of the diver’s current qualification.

Actions Required IOT Regain Currency (CBT/Ship’s Diver)			
Action required	Actions List A	Actions List B	Over 2 year since last dive
	91 day to a maximum of 120 days since last dive	121 days to a maximum of 2 years since last dive	
Complete Rules and Regulations Review	NO	YES	Rescind Diver
Review Diver Signals	NO	YES	
Complete Dive Table Review	NO	YES	
Conduct Check out dive (Pool)	NO	YES ¹	
Conduct Check out Dive (Camber Area)	YES	YES	
Supervise** a Dive, Under Supervision	YES	YES	
1. Diver may conduct EP’s in a pool if last dive was conducted within one year. However, the diver shall conduct EP’s in a pool if last dive was conducted over one year but within two years. 2. Action lists are found in Annex D. 3. ** Only if Dive Supervisor qualified.			

Figure 1-3 Actions Required to Regain Currency - CBT/Ship's Diver

Actions Required IOT Regain Currency – Port Inspection Diver			
Actions Required	Actions List A	Actions List B	Actions List C
	Last dived/ supervised 91–180 days ago	Last dived/supervised 181–365 days ago	Last dived/ Supervised over 365 days ago
Review Art 504 & 505 + ** 502 & 503 + **	YES	YES	YES
Review diver signals	YES	YES	YES
Conduct No-d dive	YES	YES	YES
EPs	YES	YES	YES
Review CF Dive tables	NO	YES	YES
Exam dive tables	NO	YES	YES
Conduct D-dive(s)	NO	YES	YES
Supervise Dive(s): d-dive &/or no-d dive	Diver — N/A Supvr — YES (No-D Dive only)	Diver — N/A Supvr — YES (D-Dive & No-D Dive)	Diver — N/A Supvr — YES (D-Dive & No-D Dive)
Recommend for re-qual crse: Yes/No?	Diver — Depends on results of assessment Supvr — Depends on results of assessment	Diver — Depends on results of assessment Supvr — Depends on results of assessment	Diver — RDC Chief's recommendation Supvr — RDC Chief's recommendation
Conduct d-dive after requal	Diver — NO Supvr — NO	Diver — YES Supvr — YES	Diver — YES Supvr — YES
NOTES			
<ol style="list-style-type: none"> 1. ** articles for review by supervisors 2. EPs = Emergency procedures 3. Decompression Dive = D-Dive 4. No-decompression Dive = No-D Dive 			

Figure 1-4 Actions Required to Regain Currency - Port Inspection Divers

120. RE-CERTIFICATION REQUIREMENTS

1. Divers attending a the Ship Diver/Ship Diver Supervisor and the Combat Diver/Combat Diver Supervisor Re-Certification Course must meet the following prerequisites (all dates are based on course start date):

- a. Be medically and dentally fit IAW CFHS Order 4000-04;
- b. Have met the CAF Fitness Standard within the past year; and
- c. Have held a CAF diving qualification at one time during their career.

2. Combat divers who are employed as D DIVE S 2-3 or as instructors of an authorized training establishment (ADC) will not require a re-certification course while so employed. Re-certification course equivalency will be granted to those members effective on their date of being posted out of the authorized dive training establishment.

SAFETY REGULATIONS**121. PERSONAL REQUIRED TO CONDUCT DIVING OPERATION**

1. Diving Operations should take place with a minimum of six members. When operating from a boat, a dedicated qualified boat operator shall also be present. The diving supervisor shall not be used as an attendant except in an emergency.

2. Compressed Air Breathing Apparatus (**CABA/CABA LITE**):

- a. Diving Supervisor;
- b. Two CABA divers paired together on a buddy line and with a float line or life line secured to the lead diver;
- c. Diver attendant;
- d. Standby diver equipped with CABA;
- e. Standby diver attendant; and
- f. Boat operator (if required).

3. **Ultra-Lite Surface Supply Diving System (ULSSDS):**

- a. Diving Supervisor;
- b. Diver;
- c. Standby diver;
- d. Two diver attendants (one each for the Diver and the Standby); and
- e. Diving console operator/communicator.

4. **Minimum Personnel required for Pool Diving (Qualified and Current Divers Only):**

- a. Supervisor;
- b. Standby Diver; and
- c. Diver.

5. Under special/particular circumstances diving operations can be conducted with the minimum following positions filled:

- a. Dive Supervisor (may also be the boat driver in smaller boats due to limited space);

- b. One diver on a lifeline attended physically or secured to a float and tended visually;
 - c. Standby Diver; and
 - d. Tenders x 2 (Refer to Article 109).
6. No more than eight divers or four pairs of divers are to be in the water at any time under the control of one Supervisor. However, when conducting training in a confined or restricted area, e.g. an FDU jackstay, the numbers may be increased to 20 divers or 10 pairs.
7. Special diving procedures that deviate from these personnel limitations are laid down in Chapters 5 and 6, and in publication B-GL-361-007/FP-001 (Combat Diver) and SMM 60-STP-1000-SAR TECH SMM.

122. FREE-SWIMMING – GENERAL RULES

1. Free-swimming without lifelines/floats shall only be carried out when the nature of the diving operation is such that the Commanding Officer considers the benefit of lifelines/buddy lines is outweighed by the risk of entanglement or other hazards. Free-swimming must be justified by the nature of the underwater task and not solely by the skill, ability and experience of the divers involved.
2. **General Conditions for Free-Swimming.** The following general conditions must be met before free-swimming can commence:
 - a. A power-driven safety boat shall be manned and operated;
 - b. Each diver is to carry a diver's day/night distress signal;
 - c. At night each diver shall display an indicator light and a strobe light which can be activated to indicate position; and
 - d. Two-way through-water communications and diver-carried acoustic pingers are recommended if available within the unit.
3. **Free-Swimming in Pairs with Buddy Lines.** While free-swimming, divers will dive in pairs joined by a buddy line. Diving in pairs is the greatest single safety measure in CABA diving. Each diver is responsible for both the assigned task and the other's safety. No more than two pairs of divers are to be in the water at one time under the control of **one Supervisor and one standby diver.**

5. Free-Swimming in Pairs without Buddy Lines/Free-Swimming Solo

- a. There are occasions when free-swimming in pairs (without buddy lines) or free-swimming solo may take place because of the special nature of the operation. Free swimming solo is only authorized under the most urgent operational conditions and only with written authority of the CO. Training, Exercise and Work-Ups diving shall be conducted using attended divers.
- b. The minimum team to conduct a diving mission involving explosives/LMDE in a free-swimming solo mode is:
 - (1) Diving Supervisor;
 - (2) Standby diver; and
 - (3) Diver.

123. FREE-SWIMMING – CLEARANCE DIVERS

1. A team of Clearance Divers in CABA, a Clearance Diving Supervisor and a Standby Diver may conduct a dive without lifelines/buddy lines where the Supervisor considers that the benefit of lifelines/buddy lines is outweighed by the risk of entanglement or other hazards. This is an exception to Article 121 and 122.
2. The following conditions apply to all free-swimming by Clearance Divers:
 - a. The planned depth and bottom time are to be such that the dive does not require decompression stops;
 - b. Divers are to remain in visual contact with one another throughout the dive. If visibility is poor, a buddy line is to be worn; and
 - c. The conditions of Article 122, paragraph 2 are to be met. Article 122, paragraph 3 is waived.
3. For underwater engineering tasks (normally under ships in harbor) where the planned depth of the dive does not exceed 30 msw, up to four Clearance Divers may free swim under the supervision of one Clearance Diving Supervisor, with one Standby Diver. A Clearance Diving Supervisor may employ qualified and experienced CAF divers as part of the four-diver team if sufficient Clearance Divers are not available.
4. For other diving tasks where the planned depth of the dive does not exceed 30 msw two Clearance Divers may free-swim under the supervision of one Clearance Diving Supervisor, with one Standby Diver, provided that the divers remain in visual contact with a descending line or shot line and with one another throughout the dive. Once on the bottom this contact may be maintained with a search line secured to the shot.

124. DEPTH LIMITATIONS

1. Maximum operational depths of Compressed Air Breathing Apparatus (CABA) and the Ultra-Lite Surface Supply Diving System (ULSSDS) in current use in the CAF are:
 - a. **Float diving CABA/CABA LITE: 30 msw;**
 - b. Lifeline diving CABA/CABA LITE: 45 msw and;
 - c. ULSSDS: 45 msw.
 2. Divers' depth limits are shown in Figure 1-1.
 3. For no-decompression depth restrictions see Figure 1-1.
 4. When the planned depth of the dive exceeds:
 - a. 15 msw. A hyperbaric chamber shall be within 4-hours travelling time; and
 - b. 45 msw. A hyperbaric chamber shall be on site.
 - c. **30 msw. A lazy shot and shot line shall be utilized.**
 5. Exceptions. The depths specified in Figure 1-1 for clearance diving operations, experimental diving research or development projects and for port inspection operations may be exceeded only by the specific authority of:
 - a. National Defense Headquarters, Director Diving Safety (D DIVE S);
 - b. Commanding Officer FDU(A), FDU(P) for Diving Operations conducted by Clearance Divers to a maximum of 10 percent greater than the depths shown in Figure 1-1;
 - c. The Head of EDU Grp at DRDC-Toronto for research or development projects to a maximum of 10 percent greater than the depths shown in Figure 1-1; or
 - d. Operational Commander for Port Inspection Divers to a maximum of 10 percent Greater than the depths shown in Figure 1-1.
125. LIFELINES, FLOAT DIVING, MARKED SWIMMING AND MARKING OF LINES

125. LIFELINES, FLOAT DIVING, MARKED SWIMMING AND MARKING OF LINES**NOTE**

Chapter 1, Annex B, Definitions Applicable to CAF Diving, should be read in conjunction with this Article.

1. Lifelines shall be, a minimum diameter of 4mm to a maximum diameter of 7 mm (shot line is the exception). The minimum breaking strength shall not be less than 340 kg and shall not be lengthened or joined to additional lengths. For Combat divers SDs and SAR Techs the diver life lines shall not exceed 60-metres maximum continuous length. For PID and Clearance divers life lines shall not exceed 75-metres in length. The standby diver's lifeline must be 15 metres longer than the longest diver's lifeline.
2. A diver shall normally be securely attached to a lifeline and shall be tended by an attendant. The lifeline shall be secured to the diver using either a bowline and two half hitches or a figure 8 to a locking carabineer (minimum rating 20 kN or 2040 kg), connected to the diver's harness, or using a bowline and two half-hitches to secure a bight of lifeline around the diver's waist. Lifelines shall be secured in such a manner that the diver's weights and breathing apparatus can be ditched without being fouled by the line and without the line becoming detached from the diver. The diver's attendant is responsible for ensuring that the diver is so secured and that the inboard line end is firmly secured at the surface.
3. The CR-4 Standard 4 Wire Comm Rope is approved to be used as a lifeline. To be employed as a lifeline, it must be secured as detailed:
 - a. Diver's end. 2 locking carabiner (minimum rating 20 kN or 2040 kg) must be spliced to the Comm Rope. The first carabiner is to be locked on the diver's harness. The second carabiner is to be locked on the D-ring of the Diver's BC. Locking carabiner shall be positioned to avoid tension on the diver's FFM;
 - b. Tender's end. 2 locking carabiner (minimum rating 20 kN or 2040 kg) must be spliced to the Comm Rope and locked to the diving platform.
4. The Diving Supervisor may authorize float diving in pairs where the lifeline (no longer than the diver's qualification depth) is securely fastened to a float of sufficient buoyancy to support the divers in their heaviest condition. There are occasions when float diving solo in CABA may take place because of the special nature of the task/ operation.
5. When float diving/marked swimming in pairs, the diver wearing the float/marker will be the first to enter the water and the last to exit.
6. If the task requires, the Diving Supervisor may authorize marked swimming or marked swimming in pairs. A light line of sufficient length to reach the maximum depth of water is secured to a diver and to a small marker (i.e. a small block of wood or Styrofoam). This is used merely to indicate the diver's position and should not be confused with float diving nor

substituted for it without a good reason. Marked swimming is prohibited if the depth of water exceeds the diver's depth qualifications (see Figure 1-2).

7. All lines used for controlling the depth of the diver are to be marked as outlined below. See Figure 1-6, Marking of Lines.

- a. Starting from the diver's end, lines are to be marked every 15 metres by one wide band of a contrasting colour for every multiple of 15 metres. For example, three wide bands would be used to indicate the 45- metre. In addition, every 15-metre length is to be marked at each 3-metre interval by a narrow band of another contrasting colour for each multiple of 3 metres. For example, four narrow bands would be used to mark the 12-metre mark and the 36-metre mark would have two wide and two narrow bands. The widths of the narrow bands are 1 cm and as a general rule, the wide 15-metre bands should be twice as wide as the narrow 3-metre bands and of a different colour. All whippings should have 1 cm spacing between markings; and
- b. Synthetic whipping should be used for marking lifelines and umbilical's. Using turns of contrasting coloured whipping 1 cm apart, mark the line by weaving the whipping material through the strands before completing the length of marking. The whipping is to be applied so that the lower whipping or the first whipping of the group to enter the water is at the depth to which the combination refers.
- c. Coloured tape may also be used to mark the depth. It should be weaved through the stands then completed by taking two complete turns.

8. When using working lines or life lines at depths greater than 30 m, the colour of the line should be a factor in dive planning. Preference to high-visibility lines for deep diving operations is highly recommended.

9. Figure 1-5 details the lines specifications are for NAVRES units with Port Inspection Divers. Regular Force unit shall not submit demands for any of the lines in Figure 1-5. Regular Force unit can locally procure lines.

Specifications and Ordering Information for NAVRES Units with Port Inspection Divers						
Rope	Description and min. Dimensions	Recommended Materials	Rope colour	Colour of THIN whippings	Colour of THICK whippings	Colour of Storage Bag
CABA Diver Life line NSN 4020-20-006-1958	7 mm (min) X 60M BS* 340 kg	Olefin/Nylon, Braided	White	Yellow	Black	White BCM3 NSN 4220-20-008-1894
CABA Standby Diver Life Line NSN 4020-02-006-1960	7 mm (min) X 75M BS* 340 kg	Olefin/Nylon, Braided	Red or Orange	Yellow	Black	Red BCM3 NSN 4220-20-008-1890
Shot line NSN 4020-20-006-1961	18 mm X 60 m BS* 900 kg	Nylon, Braided	Green	Yellow	Black	Green BCM3 NSN 4220-20-008-1895
Lazy Shot NSN 4020-20-006-1962	7 mm (min) X 42M BS* 750 kg	Nylon, Braided	Light Green	Yellow	Black	Light Green BCM3 NSN 4220-20-008-1892
LINES REQUIRED FOR ICE DIVING						
Ice diving Lifelines NSN 4020-20-006-1963	7 mm (min) X 45 m BS* 340 kg	Polypropylene 3 ply	(1) Yellow (1) Orange	White	Black	NSN 4220-01-601-3671
Ice Diving Standby Lifeline NSN 4020-20-006-1964	7 mm (min) X 60 M BS* 340 kg	Polypropylene 3 ply	Light Blue	White	Black	NSN 8465-01-599-9798
Ice diving Diver's Buddy line NSN 4020-20-006-1965	7 mm (min) X 4 m BS* 340 kg	Polypropylene 3 ply	Orange	Black		Pouch on side of ice dive storage bag
NOTES						
* = Minimum Breaking Strength						
<ol style="list-style-type: none"> 1. Lifeline Marking. All lines are to be marked IAW Article 124. See also Figure 1-4. 2. Line Construction. All line diameters are the minimum permissible. Larger diameter lifelines may be used for ease of handling. 3. Standby diver lifeline must be 15 m longer than the longest diver lifeline and red or orange in colour. 						

Figure 1-5 Diving Lines and Shot Specifications (NAVRES)

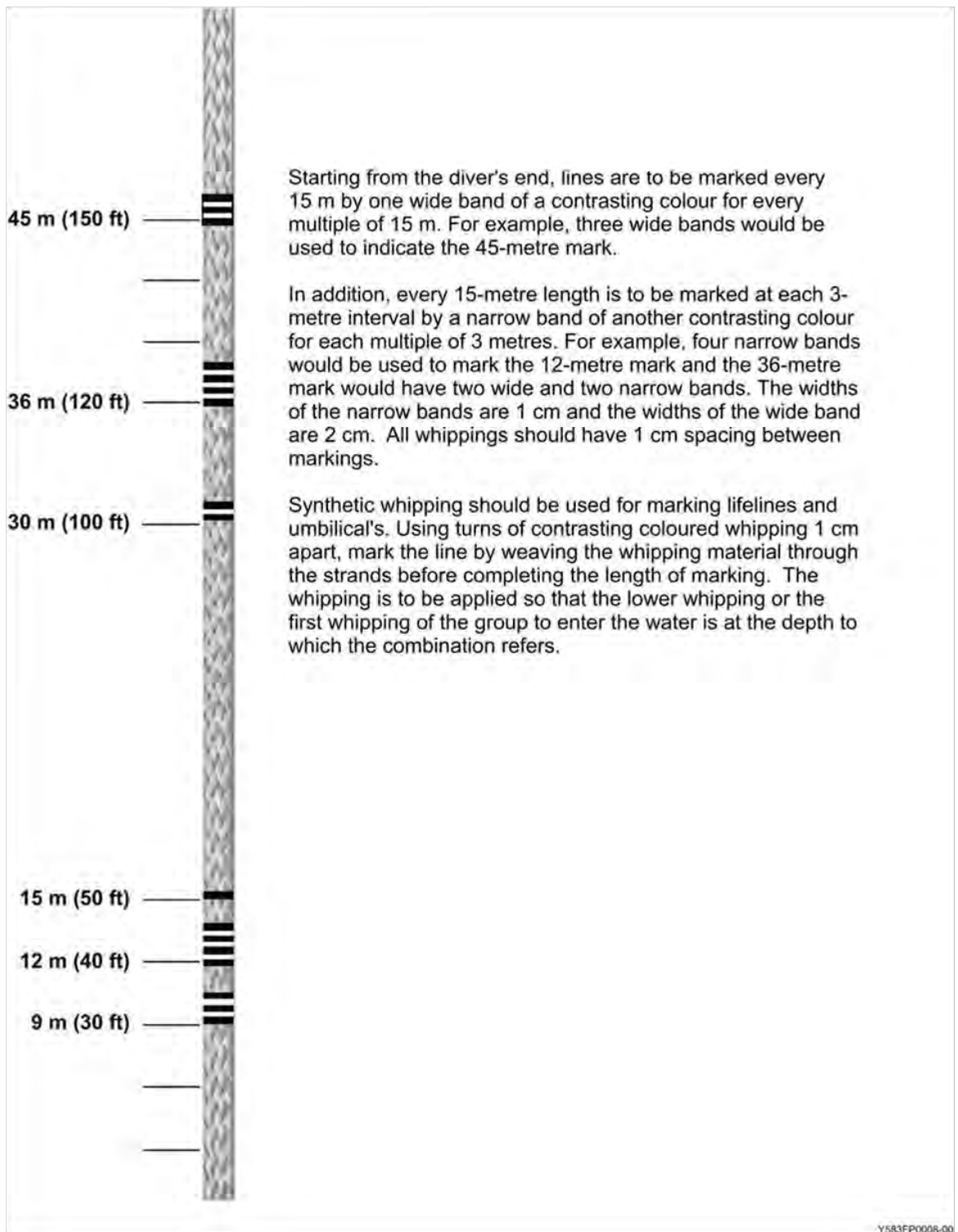
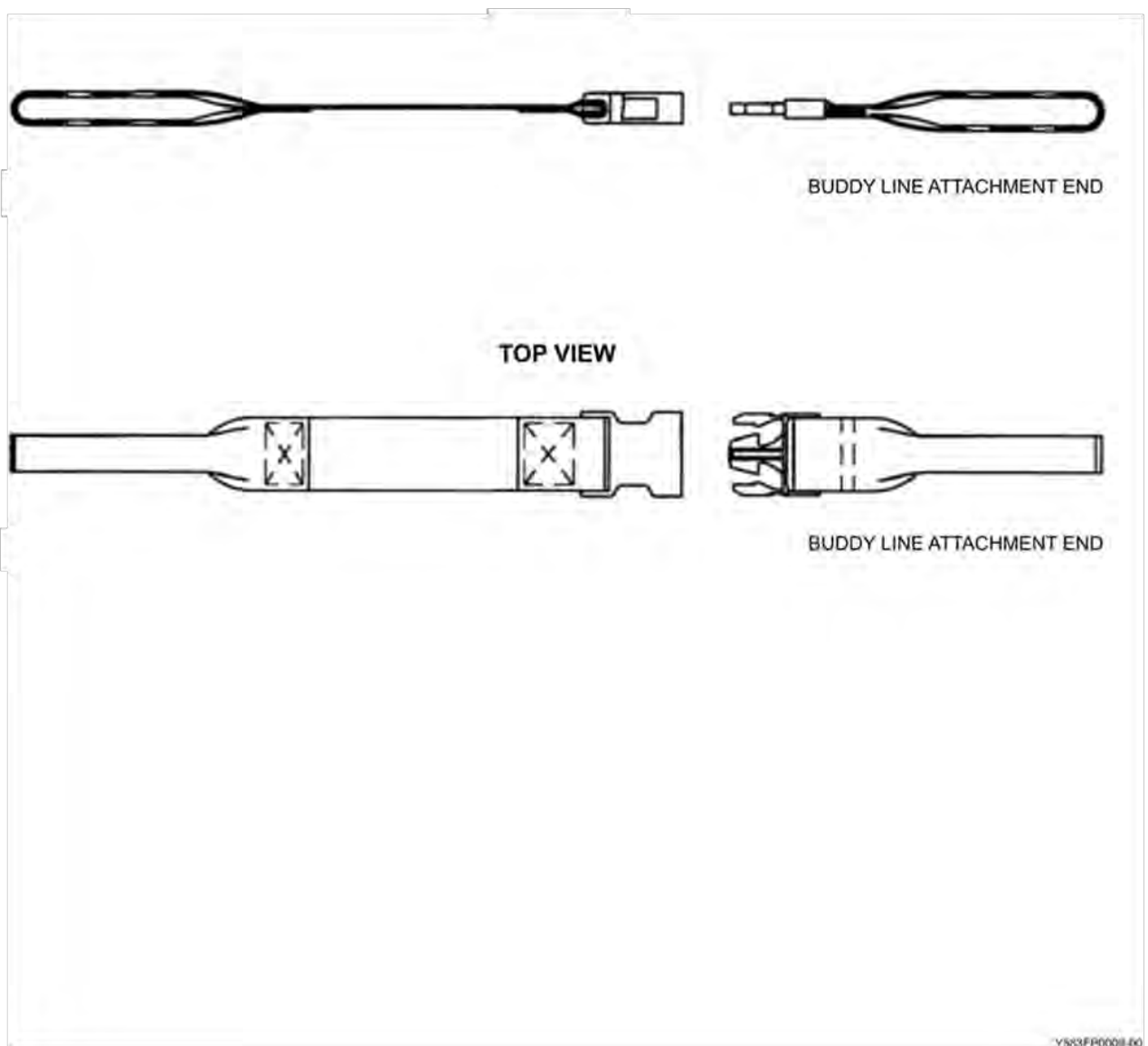


Figure 1-6 Marking of Lines

126. BUDDY LINES

1. The buddy line (Buddy Line Attachment Assembly) is made up as follows:
 - a. **Diver Attachment.** 127 mm inside diameter loop with a 178 mm tail of 38 mm (width) tubular nylon webbing, total 300 mm, with a female 38 mm (1.5 in.) FASTEX© buckle sewn into the loop; and
 - b. **Line Attachment:**
 - (1) 76 mm inside diameter loop of 38 mm tubular nylon webbing, with a male 38 mm FASTEX© buckle sewn into the loop; and
 - (2) The connecting line will be no less than 4 mm high-quality synthetic line 2 to 4 meters in length attached to the loop.
2. Divers should use a bowline knot and two half-hitches to tie each end of the Buddy line to the line attachment point.
3. The diver attachment loop shall be choked on itself after passing around and through one of the following:
 - a. Buoyancy compensator "D"-rings; or
 - b. Diver's lifeline harness webbing.
4. Buddy lines shall not be attached to a diver when jumping into the water from an elevated position such as the quarterdeck of a ship, a jetty or a helicopter.
5. Prior to jumping into the water from an elevated platform, the diver shall be checked for any possible snagged equipment or lines and shall be given a verbal clearance that it is safe to proceed.
6. The Buddy line shall be attached between the lead diver and the buddy diver. The buddy diver shall have the buddy line attached to their right side.



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Figure 1-7 Buddy Line

127. SAFETY BOATS

1. A power-driven safety boat displaying the appropriate warning signals as described in Article 150 shall be underway in the vicinity of diving operations unless divers are carrying out attended diving on lifelines from a ship or jetty.
2. The equipment required in the boat is listed Figure 1-8, CAF Diving Safety Equipment Requirements.

128. DIVERS IN BOATS UNDERWAY

1. Those in charge of boats carrying divers must always keep in mind the safety of the diver. If a diver is wearing an incompressible dry suit, it shall be completely zipped up and the weights removed.



CAF DIVING

SAFETY EQUIPMENT REQUIREMENTS

— DIVE SITES & DIVING SAFETY BOATS

<p>_____ 1) Driver in boat</p> <p>_____ 2) Standby diver at appropriate state of readiness (P*)</p> <p>_____ 3) Attendant for standby diver</p> <p>_____ 4) Flotation devices in boat or worn</p> <p>_____ 5) Dive flags / signals / shapes</p> <p>_____ 6) Divers signal recall</p> <p>_____ 7) Watch / clock (P*)</p> <p>_____ 8) Lifeline(s) / buddy line(s)</p> <p>_____ 9) CAFDTMK & O₂ resuscitator (P*)</p> <p>_____ 10) Lost diver marker buoy, line & weight</p> <p>_____ 11) Paddles</p>	<p>_____ 12) Engine</p> <p>_____ 13) Gasoline tank</p> <p>_____ 14) Gasoline line</p> <p>_____ 15) Dive sheets (P*)</p> <p>_____ 16) PRC for safety boat shipboard contact</p> <p>_____ 17) Sounding lines</p> <p>_____ 18) <i>Diving Supervisor's Handbook / Aide-Mémoire du Superviseur de Plongée (P*)</i></p>
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<p>_____ 19) Chart / map of diving area</p> <p>_____ 20) Dive tools / equipment</p> <p>_____ 21) Outboard motor tools</p> <p>_____ 22) Spare spark plugs</p> <p>_____ 23) Spare shear pin</p> <p>_____ 24) Hand-held light</p>	OPTIONAL
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NOTES

1. Dive site / diving safety boat: optional items are shaded. All other items are **mandatory** and must be in the diving safety boat / at the dive site.
2. For pool diving the following is required on the pool deck (marked 'P*' above): items 2, 7, 9, 15 and 18.

Figure 1-8 CAF Diving Safety Equipment Requirements

129. FIRST-AID EQUIPMENT

1. The standardized CAF Dive Team Medical Kit (CAFDTMK) and an oxygen resuscitator (DAN 02) are essential items that shall be kept at every dive site.
2. All items as listed in Annex E are mandatory and shall be on the dive site/in the safety boat. The C-Spine Immobilization portion of the CAFDTMK may be too large to be taken on small safety boats, and may remain on shore in the dive support vehicles. If room permits in the boat/vessel supporting dive ops, the complete kit should be taken.
3. For all dives, the dive supervisor is to ensure that there is enough oxygen at the dive site to allow for the immediate treatment and transportation of two divers to a secondary care facility.

130. WEARING OF KNIVES

1. All divers are to carry knives when underwater and when acting as supervisor, standby divers or attendants.
2. A second knife, known as a safety knife, is required for all diving operations. This knife shall be worn in the safety triangle between the diver's waist and neck within easy reach with either hand. This does not mandate the sole use of the cummerbund for securing the knife sheath to the Buoyancy Compensator Device (BCD).
3. The safety knife may be worn on either shoulder provided that the sheath is secured to the BCD by at least two physical securing methods (e.g. tie strap, strobe holders), and that the diver's partner and standby diver are aware of the location.

131. MEALS

1. Diving is not to take place within two (2) hours of consumption of a heavy meal. However, diving should not take place on an empty stomach. The diver should take a light snack before diving.

132. CONTACT LENS, DENTURES AND PIERCINGS

1. Hard-style, unvented contact lenses are not to be worn while diving. Gas may be trapped under the lens resulting in injury to the eyes.
2. Soft-style contact lenses and vented hard-style lens may be worn.
3. Dentures and all non-permanent fixtures (e.g. piercings) must always be removed before diving. They could be dislodged during the dive and obstruct the air passage, with potentially fatal results should the diver lose consciousness.

133. ALCOHOL AND CANNABIS

1. Dive Supervisor shall ensure that the efficiency of a diver has not been compromised by the consumption of alcohol, drugs or medication.
2. Alcohol shall not be consumed 8 hours prior to diving.
3. Refer to CAF policy for the use of Cannabis:
 - a. CANFORGEN 151/18 CDS DIRECTION ON USE OF CANNABIS BY CAF MEMBERS;
 - b. NAVORD 5004-1
 - c. QR(and)O Article 19.14;
 - d. QR(and)O Article 20;
 - e. DAOD – Series 5019 Conduct and performance deficiencies; and
 - f. DAOD – Series 7023 Defence ethics.

134. MEDICATIONS AND DIVING

1. Prior to diving, the diver shall report to the Supervisor all drugs, medications or supplements, whether prescribed or over-the-counter, that a medical officer or physician has authorized them to take while diving.
2. Divers must also inform the Supervisor of any medication taken without such authorization. If there is any doubt as to the safety of the diver, the diver shall not be permitted to dive. If necessary, written authorization of a medical officer or physician may be provided to the Supervisor.
3. Drug reactions such as sleepiness, nausea, dizziness, weakness, skin rash, etc. shall be reported immediately by the diver to the Supervisor who will refer the diver to a medical officer or physician for a decision concerning temporary restriction from diving duties.
4. When required, medical officers and physicians may seek advice on the effects of a diver's medication from the Consultant in Diving and Hyperbaric Medicine at DRDC - Toronto. Refer to page i/ii, Diving Emergency Assistance/ Medical Consultation.

135. FEMALE DIVERS

1. FEMALE DIVERS WHILE PREGNANT SHALL NOT DIVE UNDER ANY CIRCUMSTANCES. A female diver who suspects she is pregnant shall not dive and is to report to a medical officer immediately for confirmation. If pregnancy is confirmed she shall be declared "UNFIT FOR DIVING" and her CAF 849 annotated accordingly. Prior to resuming diving duties the diver must be cleared by a Diving Medical Officer and her CAF 849 annotated as "FIT TO DIVE".

136. USE OF CAF DIVING EQUIPMENT

1. Only current and qualified CAF divers are authorized to use CAF diving equipment (the only exception is Article 112, Allied divers and Article 115 Cbt Diver Selection).
2. All dives using Service equipment will be defined as either operational, training or proficiency dives and will comply with rules and regulations contained in the CAF Diving Manual.

137. USE OF NON-CAF DIVING EQUIPMENT

1. Use of non-CAF personal diving equipment for CAF diving operations is at the discretion of the Diving Supervisor.
2. However, the following essential diving support equipment must not be substituted:
 - a. CABA cylinders;
 - b. CABA regulators with integrated mask;
 - c. Buoyancy compensators;
 - d. Weights; and
 - e. Approved diving suit.
3. Deployed dive team Commanding Officers may authorize the use of non-service CABA cylinders if they determine that the logistic and cost benefit of utilizing non-service CABA cylinders is greater than using in-service CABA cylinders and that the following requirements are met:
 - a. The dive team officer/supervisor must ensure the intended equipment provider is certified by a known and credible civilian/military dive organization and the maintenance/testing of their CABA cylinders meets the CAF standards of (1) hydrostatic testing completed every 5 years (60 months) by an authorized technical facility and (2) an annual visual inspection is completed by a qualified technician. Supporting maintenance documentation must also be provided to the dive officer/supervisor by the equipment provider prior to deployment;
 - b. Once on site the dive supervisors must physically check the CABA cylinders to ensure (1) the hydro stamp and annual visual inspection stickers are in date along with (2) a check of the CABA cylinder valve for serviceability;
 - c. If CABA cylinders are not marked by a visual maintenance sticker supporting documentation confirming the visual maintenance was carried out must be provided prior to use; and

- d. Air sample requirements from non CAF sources remain the same IAW Article 142.

138. BUOYANCY COMPENSATORS

1. The Buoyancy Compensator (BC1) is a primary piece of life support equipment for the diver and shall be worn by all CAF divers dressed in CABA equipment.
2. Buoyancy compensators shall NOT be used by the diver to assist in carrying heavy items underwater. The excess positive buoyancy that this would require could cause an uncontrolled ascent if the object being carried were dropped. A separate lifting bag or working line should be used.

139. HP AIR/GAS CYLINDER TESTS

1. All HP air and gas diving cylinders used in conjunction with diving operations shall be hydrostatically tested IAW CFTOs (refer to Chapter 1, Annex C, Orders and Reference Publications Pertaining to CABA Diving) at intervals of five years (60-monthly) by the appropriate dockyard.
2. Diving cylinders that have exceeded five years (60 months) since their last stamped or documented hydrostatic test are not to be used until retested.
3. CABA cylinders must also have an annual internal visual inspection by an authorized Clearance Diver.

140. CABA Light and Ultra-Light Weight Surface Supply (ULSSDS) Restrictions

1. Due to potential damage to the rail system no water entries from heights are authorized. Divers shall use the stride entry or backwards roll from boat method to enter water.
2. The standby diver shall always use the large volume (6.7 L) tanks.
3. The divers may use the small volume (3.4 L) tanks for no-decompressions dives to a maximum depth of 15 msw.
4. Due to the design of the Reserve Value Assembly (RVA) it is possible for the diver to breath down the emergency air supply under certain circumstances. To mitigate this risk, the diver must regularly check the SPG, if the emergency air supply reaches 160 bar the dive shall be aborted.
5. Ice diving and cold water diving operations are approved IAW Annex 5B.

141. DIVE PROPULSION VEHICLES (DPV)

1. The use of DPV is restricted for use by Clearance Divers, Combat Divers, and Port Inspection Divers.
2. DPV's are locally purchased and shall meet these specifications:

- a. One person operation (No mass delivery vehicles);
 - b. The propeller can be stopped/jammed with a gloved hand;
 - c. Tow strap uses a large bolt snap or similar hardware for quick release; and
 - d. Throttle is spring loaded (Deadman switch type).
3. DPV are capable of traveling up to 81m/min, therefore DPV shall not be used for initial descents or traveling to the surface.
4. With the written permission of the CO, Combat Divers and Port Inspection divers may Free Swim IAW art 122. Further to the direction given in Art 122, the following requirements must also be met when free swimming with DPV's:
- a. If underwater visibility is less than 4.5 meters DPV operations will not take place.
 - b. Through water wireless communications:
 - i. Diver to Diver
 - ii. Diver to surface (safety boat);
 - b. The maximum depth of water shall be less than 30 msw;
 - c. Dives will be conducted in pairs and divers will remain within visual contact with each other; and
 - d. Each diver will wear an acoustic pinger.
5. Clearance Diver may conduct Free Swimming with DPV's IAW art 123. In addition to the requirements of art 123, Clearance Divers shall conform to sub paras a. thru d. as listed above.

142. DIVING EQUIPMENT MAINTENANCE

1. Service diving equipment and diving support equipment shall be tested, repaired and maintained by qualified personnel IAW appropriate CFTOs. Refer also to the Diving DAODs for amplification of policy on diving equipment.
2. Should no relevant CFTO be in existence, operators and maintainers shall comply with the manufacturer's recommendations for maintenance, in consultation with NDHQ (DMEPM). These directives will normally be found in the appropriate repair manuals for the equipment concerned.
3. Diving equipment is life support equipment. A high level of quality control is necessary in carrying out repairs to the equipment. Maintenance personnel are to be aware of the hazards in handling high-pressure gases, toxic and contaminating vapors and the explosive hazard resulting from mixing oxygen and hydrocarbons.

143. PURITY OF COMPRESSED BREATHING AIR AND GASES FOR DIVERS

1. Although it is possible to breathe small concentrations of various toxic gases on the surface with no observable effect on the body, at depth the partial pressure of these gases will be greater and their effect can be magnified considerably. Great care must therefore be taken to ensure that breathing gases are pure.
2. The standards required by the CAF for the purity of compressed air and gases supplied from pressurized containers or from air compressors (refer to Article 438, Air Compressors), intended for human respiration underwater or in hyperbaric chambers are detailed in D-87-003-000/SG-001, Purity of Compressed Breathing Air and Gases for Divers. All compressed air or gases intended for diving purposes shall meet these standards.
3. Samples of breathing air are to be forwarded to a laboratory for analysis IAW C-87-020-001/NG-001, Special Test Instructions: Divers' Breathing Air Analysis, at intervals not exceeding six months so that purity may be confirmed.

NOTE

There is no requirement for an air sample after the Securus filter has been changed as a result of a flashing yellow light.

4. Urgent sampling may be necessitated by operational requirements, unscheduled maintenance or suspected contamination. Instructions for rush air sampling are promulgated in C-87-020-001/NG-001.

144. UTILIZING DIVING AIR FROM NON-CAF SOURCES

1. Planning for diving operations, exercises and training must take into account the replenishment of diving air. Except as outlined here, teams are to utilize CAF compressors.
2. When a CAF compressor for a deployed team cannot be arranged, the Diving Officer must justify and obtain written authority through the chain of command to proceed, utilizing a non-CAF air source. The command authority granting approval shall determine whether a CAF air source is available, feasible and practical, and detail in writing the course of action to be taken by the diving team. Since the standing CAF air quality program is established and funded to support CAF assets only, all costs associated with non-CAF air source testing must be borne by the requesting unit or command.
3. It is essential for safety that the quality of non-CAF air be confirmed with in CAF breathing air standards in advance of any diving. To address this requirement, the following procedure is authorized:
 - a. If sample is not within CAF standards, CoC(s) may initiate a waiver request through SADMASP and D DIVE S and carry out the test procedures outline in paragraph 3.b to 3.g;
 - b. The diving team OPI is to send a sample cylinder, plus the directions contained in C-87-020-001/NG-001, to the facility that will be supplying the air;

- c. The operator of the facility is to be requested to provide an air sample as directed in C-87-020-001/ NG-001 and return the sample cylinder to the diving team OPI;
 - d. The team OPI is to ensure all documentation is correct and forward the sample cylinder and its paperwork IAW current CAF procedures;
 - e. DMEPM will ensure the report on the sample results follows normal distribution;
 - f. If the sample meets or exceeds CAF purity standards in D-87-003-000/SG-001, the specific source tested is acceptable for CAF use for a period of six months from the test date, and the command authority at paragraph 2, may authorize its use. If required, technical and scientific assistance in interpreting the results is available from DRDC - Toronto ADM (Mat) DMEPM; and
 - g. A copy of the air sample results and the command authority to use non-CAF air is to be available at the dive site and kept with the diving team's records.
4. On receipt of the completed waiver request, authority and responsibility to dive rest with the unit operational Chain of Command, based on recommendations detailed in the waiver.
 5. Completed non-CAF air source waivers to be forwarded to D DIVE S for historical and record keeping purposes.
 6. If the air/gas sample from the source to be used deviates from specifications C-87-003-000/SG-001, the Unit is required to conduct a risk analysis by completing CF Standard – Purity of Compressed Breathing Air and Gases for Divers Deviation form. The form can be downloaded from <http://dfc-rfd.mil.ca/en>. The form is available in English and French: Form numbers are DND 4060-E and DND 4060-F.




145. HOT/WARM WEATHER DIVING CONDITIONS

1. In hot weather, particular attention must be given to maintaining work/rest schedules and essential water consumption to prevent heatstroke and hyperthermia. Even in warm weather, a fully dressed diver will undergo considerable heat stress, as sweating will produce no cooling effect. It is very important to understand that severe heat stress can escalate rapidly to unconsciousness and death in extreme circumstances. It may not be possible to reverse the symptoms after a certain point, when the body's metabolic control system begins to break down. It is not comparable to recovery from hypothermia (abnormally low body temperature) as addressed in Chapter 2.
2. The work/rest schedules and levels of water consumption provided in Figure 1-7 are intended for maintaining long-term operations. These were developed based on non-diving individuals who were acclimatized to heat stress, thus they should be fully implemented in order to protect dressed divers. Improved guidance will be promulgated when available.

3. As a method of improving performance and preventing hyperthermia divers should be acclimated to heat as part of a deployment. For most individuals this will occur within one week of arrival in the hot region.
4. Hydration rates are mandatory. The work/rest schedules should be adhered to at all times.
5. The Standby Diver, if fully dressed in diving equipment, is treated at the Moderate Work Rate.
6. Extreme conditions beyond the upper scales of the table require extra vigilance on the condition of the divers and should be avoided when possible. Additional protective measures should be taken such as providing shade, wearing cooling jackets if available, and dousing with water.

Maximum Expected Air Temperature at Dive Site

Diver Work Rate ↓	1 26°C (78°F)		2 28°C (82°F)		3 29°C (85°F)		4 31°C (88°F)		5 32°C (90°F)	
	Rest (min/hr)	Water	Rest (min/hr)	Water	Rest (min/hr)	Water	Rest (min/hr)	Water	Rest (min/hr)	Water
	LIGHT	0	0.5	0	0.5	0	0.75	0	0.75	10
MODERATE	0	0.75	10	0.75	20	0.75	30	0.75	40	1.0
HEAVY	20	1.0	30	1.0	30	1.0	40	1.0	50	1.0

 0.5 litres/hour	 0.75 litres/hour	 1.0 litres/hour
---	--	---

DIVER WORK RATE EXAMPLES

- LIGHT**Slow walking on hard bottom / swimming: 0.5 knot
MODERATESlow walking on mud bottom / swimming: 0.85 knot
HEAVYMax speed walking on mud bottom / swimming: 1+ knot

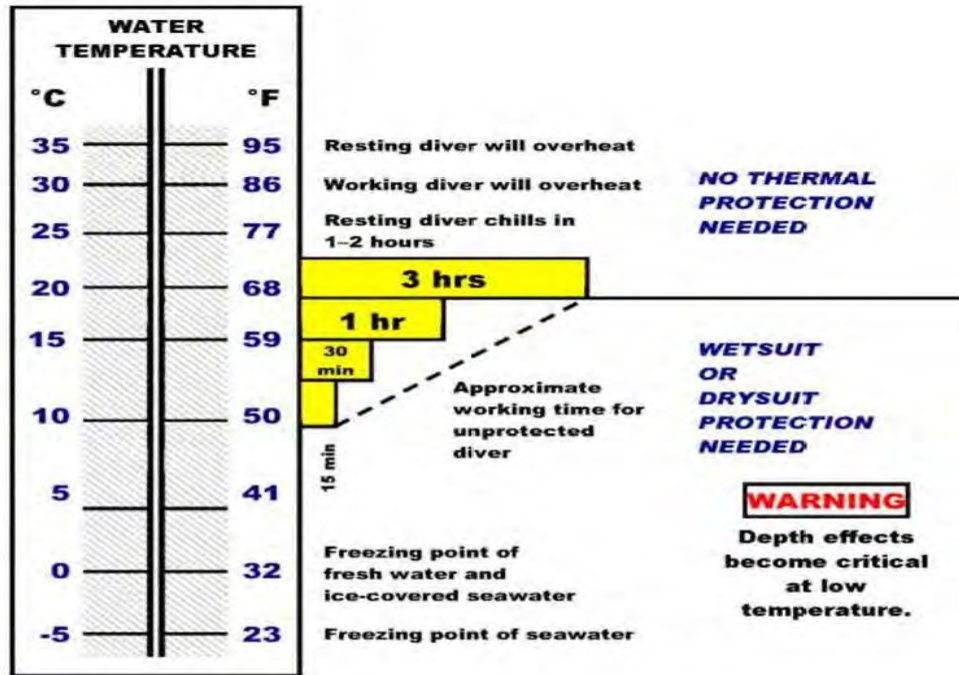
This Table has been adapted from the original non-diving version, with acknowledgements to:
 SJ Montain, WA Latzka and MN Sawka (1999). *Fluid replacement recommendations for training in hot weather. Mil. Med. 164: 502-508.*
 MA Kolka, WA Latzka, SJ Montain, WP Corr, K O'Brien and MN Sawka (2003). *Effectiveness of revised fluid replacement guidelines for military training in hot weather. Aviat. Space Environ. Med. 74: 242-246.*
 During, JVGA and R Passmore (1967). *Energy, Work and Leisure. London Heinemann Educational Books Ltd., p. 84.*

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Figure 1-9 Thermal Hydration Table

146. COLD WEATHER DIVING CONDITIONS

1. Diving under cold weather conditions exposes the diver and surface personnel to a variety of hazards including air supply freeze-up, frostbite and hypothermia.
2. Special considerations must be taken into account by the Diving Supervisor when surface conditions fall beyond ZONE A in Figure 1-11, Wind Chill Index Chart.
3. Before diving commences, the Diving Supervisor must consider:
 - a. The warmth and comfort of divers and surface personnel;
 - b. The availability of shelter and extra insulating garments; and
 - c. Whether to limit the duration of the dive(s).
4. Article 215, Hypothermia and Chapter 5, Annex B, Ice Diving Standard Operating Procedures - CABA/ ULSSDS, give specific procedures and information on cold weather diving and required precautions.



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Figure 1-10 Thermal Factors Affecting Divers

Wind Chill Index Chart

Temperature (°C)

	Calm	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
Wind Speed (kph)	5	-2	-7	-13	-19	-24	-30	-36	-41	-47	-53	-58
	10	-3	-9	-15	-21	-27	-33	-39	-45	-51	-57	-63
	15	-4	-11	-17	-23	-29	-35	-41	-48	-54	-60	-66
	20	-5	-12	-18	-24	-30	-37	-43	-49	-56	-62	-68
	25	-6	-12	-19	-25	-32	-38	-44	-51	-57	-64	-70
	30	-6	-13	-20	-26	-33	-39	-46	-52	-59	-65	-72
	35	-7	-14	-20	-27	-33	-40	-47	-53	-60	-66	-73
	40	-7	-14	-21	-27	-34	-41	-48	-54	-61	-68	-74
	45	-8	-15	-21	-28	-35	-42	-48	-55	-62	-69	-75
	50	-8	-15	-22	-29	-35	-42	-49	-56	-63	-69	-76
	55	-8	-15	-22	-29	-36	-43	-50	-57	-63	-70	-77
	60	-9	-16	-23	-30	-36	-43	-50	-57	-64	-71	-78
	65	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79
	70	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-80
	75	-10	-17	-24	-31	-38	-45	-52	-59	-66	-73	-80
	80	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81

NOTES

$W(°C) = 13.12 + 0.6215T_{air} - 11.37V_{10m}^{0.16} + 0.3965T_{air}V_{10m}^{0.16}$

Where: **W** is the wind chill index, based on the Celsius temperature scale. **T_{air}** is the air temperature in degrees Celsius (°C), and **V_{10m}** is the wind speed at 10 metres (standard anemometer height), in kilometres per hour (kph). Use the colour code to determine risk of frostbite and/or hypothermia. In sustained winds over 50 kph (30 mph), frostbite can occur faster than indicated. Diving Beyond ZONE A requires freeze-up precautions IAW Annex B5.

Cold Exposure Risks Related to Wind Chill

ZONE	Wind Chill Index (°C)	Risk of Frostbite	Risk of Hypothermia after Extended Exposure	Health Concerns
A	0° to -20°	LOW	LOW	COLD DIVING LIMIT Slight to mild discomfort
B	-21° to -27°	LOW	MODERATE	Uncomfortable
C	-28° to -39°	INCREASING Exposed skin can freeze in 10 - 30 minutes.	MODERATE	Check face and extremities (fingers, toes, ears, nose) for numbness or whiteness
D	-40° to -47°	HIGH Exposed skin can freeze in 5 - 10 minutes.	MODERATE	
E	-48° to -54°	HIGH Exposed skin can freeze in 2 - 5 minutes.	HIGH	
F	≥ -55°	EXTREME	HIGH Exposed skin can freeze in less than 2 minutes.	WARNING Outdoor conditions are HAZARDOUS .

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Figure 1-11 Wind Chill Index Chart

147. CONTAMINATED WATER DIVING

1. Diving can be conducted in moderately contaminated waters, provided that the appropriate CAF diving personal protective equipment is worn.
2. Determining the level of water contamination is difficult and the tools or resources are limited to measure contamination levels. If the level of contamination is suspected to be higher than the capabilities of CAF dive equipment, PMED, Environment Canada, FDU's, and other outside agencies should be consulted prior to conducting dive operations. Refer to Article 530 to 535 for procedures and precautions.

148. REDUCED UNDERWATER VISIBILITY

1. When underwater visibility is poor or nil, certain additional procedures, precautions and restrictions are required.
2. Free-swimming is further restricted as described in Article 122 and 123 and an underwater pingers may be required IAW Article 434.
3. Underwater signals IAW Article 151 and Figure 1-14 may need to be passed by arm-squeezes and if necessary for the task, additional signals provided during the pre-dive brief.
4. If decompression is planned and it is likely the diver may lose contact with the shot line, a means must be provided for the diver to regain the shot line or to safely ascend to the stop depth.

149. POOL DIVING

1. Conducting dives in swimming pools provides an alternative means of maintaining a diver's currency. Pool diving is also used to conduct initial diver selection and training. It should however be noted that pool diving is neither equivalent to nor a substitute for the conduct of realistic training at open-water sites.
2. As the diving hazards associated with pool diving are less than those of open waters, certain rules and regulations may be relaxed. The Notes in Figure 5-3, Diving Supervisor's Checklist (CABA), and Figure 1-8, CAF Diving Safety Equipment Requirements, indicate the permitted relaxations during pool diving.
3. The risk of embolism remains significant and all divers are to be reminded that typical swimming pool depths may easily result in embolism if the diver fails to breathe normally or to continuously exhale upon ascent.
4. Unqualified divers (e.g. diving course candidates) shall not use breathing apparatus unless under the auspices of a CAF diving training establishment.
5. It is essential that the dive is supervised and conducted as a CAF dive and not as a swimming evolution. A qualified standby diver must be on site. A lifeguard is not required in this situation.

DIVING SIGNALS**150. WARNING SIGNALS**

1. When diving operations are in progress, the Diving Supervisor is responsible for ensuring that appropriate signals are displayed as follows:

a. **By Day:**

- (1) Code Alpha (and in small craft a rigid replica of Code Alpha) visible all around the horizon and not less than 1 metre above the water line;
- (2) In waters where merchant traffic may be encountered, three shapes in a vertical line where they can best be seen. The highest and lowest of these shapes shall be balls and the middle one a diamond. This is in addition to paragraph 1.a. (1). Small craft need only display a rigid replica of Code Alpha;
- (3) In areas where pleasure craft are operating it is recommended that the civilian SCUBA ("Diver Down") flag be displayed. This is a red flag with a white diagonal stripe running from the upper corner of the hoist to the lower opposite corner; and
- (4) In addition, when submersible operations are conducted, "November Echo 2" shall be displayed.

b. **By Night:**

- (1) Small Craft. Three lights in a vertical line. The highest and lowest of these shall be red, and the middle light shall be white. They shall be visible around the horizon at a distance of at least 3.7 km (2 NM);
- (2) Other Vessels. Lights prescribed in the current Transport Canada/Transports Canada Collision Regulations.

BY DAY, WHEN DIVING OPERATIONS ARE IN PROGRESS, THE DIVING SUPERVISOR ENSURES THE DEPLOYMENT OF APPROPRIATE SIGNALS, AS FOLLOWS:



- (1) CODE ALPHA VISIBLE ALL AROUND THE HORIZON AND NOT LESS THAN 1 METRE ABOVE THE WATER LINE.

SMALL CRAFT NEED ONLY DISPLAY A RIGID REPLICA OF CODE ALPHA.



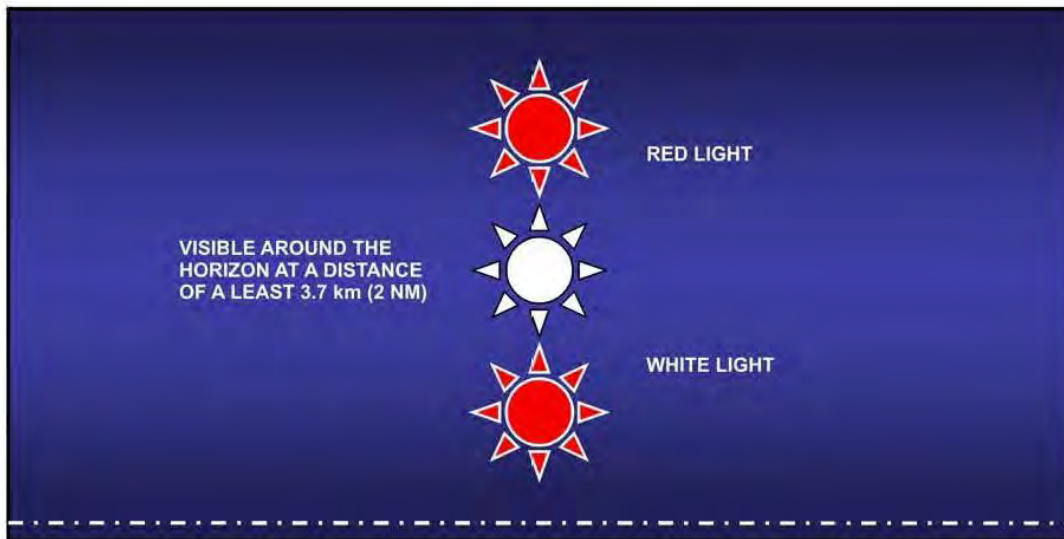
- (2) IN ADDITION TO CODE ALPHA, IN WATERS WHERE MERCHANT TRAFFIC MAY BE ENCOUNTERED, THESE SHAPES (BALL, DIAMOND BALL) IN A VERTICAL LINE WHERE THEY CAN BEST BE SEEN.



- (3) "DIVER DOWN" FLAG, IN ADDITION TO SIGNALS ABOVE, IN AREAS WHERE PLEASURE CRAFT ARE OPERATING.

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Figure 1-12 Diving Warning Signals (DAY)



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Figure 1-13 Diving Warning Signals (Small Craft, NIGHT)

151. COMMUNICATION WITH SWIMMING DIVERS

1. Manual Line Signals:

- a. In the absence of any alternative method, manual signals by line are employed for all communications where two divers or a diver and an attendant are in contact by lifeline;
- b. Manual line signals are of two kinds:
 - (1) PULLS..... Long, steady and distinct pulls; and
 - (2) BELLS..... Short, sharp pulls made with the same timing as striking a ship's bell.
- c. All signals are to be preceded by one pull to attract attention;
- d. All signals received must be acknowledged by repeating the signal (but only if the signal is clearly understood):
 - (1) If a signal is not acknowledged or is acknowledged incorrectly the person making the signal shall repeat it until a correct acknowledgement is received;
 - (2) When a signal is being acknowledged incorrectly the Diving Supervisor may decide to surface the diver to clarify the situation; and

- (3) It must be remembered that a diver at work may not always be able to acknowledge a signal immediately; the attendant must wait a few moments before repeating the signal.
 - e. If the lifeline becomes fouled, it may be impossible to get signals through. The lifeline shall be unfouled immediately. When the Diving Supervisor has decided that the use of lifelines is required and it is the only form of communication with the diver, loss of such communication should be considered an emergency (refer to Article 222);
 - f. Particular care should be taken when diving in deep water or strong tides to ensure that the utmost clarity in the transmission of signals is achieved. The ability to make and interpret signals in such conditions must remain largely a matter of experience;
 - g. Manual line signals for diving are shown in Figure 1-14; and
 - h. Supplementary signals in addition to those listed in Figure 1-14 may be arranged between the Diving Supervisor and the diver to take care of special circumstances as they occur.
2. **Additional Signals:**
- a. Unless through-water communications are available, communications during free-swimming operations are extremely limited;
 - b. Sound signals are used from the surface control position and can be made by tapping on the diving ladder or on the ship's hull, or by underwater explosions using the Divers' Signal Recall or authorized Electronic Diver Recall;
 - c. In addition to the hand and special signals shown in Figure 1-14, a diver at night shall display a diver's indicating light (refer to Article 428) and when surfacing at night and requiring assistance shall switch on a strobe light (refer to Article 429); and
 - d. When urgent assistance is required, the appropriate end of the day/night distress flare is to be actuated:
 - (1) RED FLARE is to be displayed at night; and
 - (2) INTERNATIONAL ORANGE SMOKE is used during daylight.

152. COMMUNICATIONS AT THE DIVE SITE

1. One of the Supervisor's primary responsibilities is to ensure that clear communications are maintained at all times between members of a diving team. Both safety and the successful completion of the task demand that all team members are able to understand and respond to instructions. Equipment failure, noisy environments and other difficulties can result in a communications breakdown.
2. Similarly, since divers from different nations or linguistic groups under certain conditions may be permitted to dive in a CAF diving team, language capabilities must also be carefully considered. Article 223, Lost Diver, and Figure 2-1, Diving Emergency Procedures refer to lost communications. Other volumes of the CAF Diving Manual contain specific communications details and SOPs, and are also subject to the principles outlined in this Article.
3. Divers must be able to communicate their situation effectively to the Supervisor, standby diver and other team members. Additionally the dive team must be able to effectively communicate with their Command and emergency services from the dive site, particularly in remote locations. In an emergency clear and timely communications can mean the difference between life and death.
4. If the Supervisor is not fully satisfied that effective team communication is possible for either equipment or language reasons, the task shall be terminated or the diving roster re-organized.
5. Due to the potentially fatal consequences of ineffective communications, command should be informed of the circumstances and the actions taken by the Supervisor. They should initiate administrative corrective action as required.

ADMINISTRATION AND MEDICAL RECORDS**153. DIVING ADMINISTRATION**

1. CAF Diving DAODs are the primary administrative orders dealing with CAF diving organization, responsibilities and administrative procedures. In the event of any discrepancy between CAF Diving DAODs and this manual, CAF Diving DAODs shall have precedence.

154. DIVING ALLOWANCE

1. Subject to any limitations prescribed in orders issued by the Chief of the Defense Staff, any individual qualified in any of the categories of diver shown in Figure 1-1 is entitled to a diving allowance as prescribed in CBI 205.34, Diving Allowance.

155. MEDICAL, DENTAL AND PHYSICAL FITNESS REGULATIONS

1. All CAF divers and diving candidates shall be medically examined IAW CFHS Order 4000-04, Shallow Water Divers Periodic Health Assessment and Medical Administration Instruction.

2. All CAF divers require an annual dental examination.

3. On first selection for training in diving, candidates shall meet the standard as defined in CFHS Order 4000-04. The medical examination shall be conducted by a qualified Diving Medical Officer or a Medical Officer appointed by the Command Surgeon.

4. Complete medical examinations shall be conducted every two years for all divers with a screening examination in alternate years. The one exception to this rule is that divers actively involved in saturation or experimental diving must complete a medical screening provided by EDU Grp and signed off by an ADMO.

5. CAF Divers must meet the CAF fitness standard. Upon completion of testing, PSP staff or unit PA will record the results and sign the CF 849. Divers who fail are unfit diving until they pass the CAF Fitness standard.

6. All diving candidates shall undergo the prescribed tests IAW CFHS Order 4004-04 before commencing training and shall not undertake any diving if they fail to pass.

7. A diver whose examination for dental or physical fitness has passed the one-year anniversary date may be permitted to continue diving, provided it has been verified by a unit PA that no ongoing dental or physical fitness problems exist. This option shall only be considered when factors beyond the member's or unit's control have resulted in a delay in the scheduled examination. The duration of the extension, while at the discretion of the Commanding Officer, shall not exceed 6 months, and shall be noted in the diver's log on the appropriate pages. I.e. Physical fitness/ Dental currency extended to (date of appointment within 6 months). This entry must be signed by Commanding Officer.

MedicAlert® Tag:

- a. The MedicAlert® tag is a warning device that indicates to others that the wearer may require special medical attention and ensures this condition is not aggravated by inappropriate first aid or medical treatment; and
 - b. All divers shall be in possession of a MedicAlert® tag while diving and shall wear it for 24 hours after completing a dive using compressed air or gas. ADM (HR-Mil) INSTRUCTION 09/04 and CFHS Order 7100-01 gives details of procurement. The tag must read "SCUBA DIVER" or "DIVER" as appropriate.
8. In the event of a fatality resulting from a diving accident or incident, the post-mortem examination of the victim shall be conducted IAW CFHS Order 7100-01 (42-01), Annex C. This regulation also applies to drowning.
9. Before being returned to fit diving status following a medical restriction or hyperbaric treatment, the diver must be assessed by a medical authority as described at Article 225 and the results annotated in the member's medical file.

156. CF 849 CANADIAN ARMED FORCES PERSONAL DIVING LOG

1. All CAF divers shall have a CF 849 (11-2005) Canadian Armed Forces Personal Diving Log to record required details of any dive or exposure to increased pressure.
2. Each entry in the diving log shall be signed by the Diving Supervisor and Diver.
3. The "MEDICAL EXAMINATIONS" page shall be completed and signed by the examining medical officer on each occasion the holder undergoes a complete diving medical examination (refer to Article 155) and screening medical every alternate year by a Diving Medical Physician Assistant (QL6B) or Diving Medical Officer (ensure log accompanies member to examination).
4. Delegation of authority to sign CAF 849 on behalf of the Diving Medical Officer:
 - a. To prevent delay and ensure that the diver's log is current and available, a form letter, approved at 6600-1 (SURG GEN) 29 August 2000 (NOTAL), is authorized for use. The form letter is available from all RDCs, NAVRESHQ, CFSME (ADC) and FDU. The following process is to be utilized to ensure that the diver's log is properly completed and the information is correctly filed:
 - (1) The form letter title "Delegation of Authority to Sign CF 849 On Behalf of Diving Medical Officer" is to be initiated by the diver's home Unit;
 - (2) The letter is to accompany the diver's medical documentation to the DMO;
 - (3) The DMO is to complete the form and return it to the diver's home Unit;
 - (4) The diver's Commanding Officer is to review the letter and enter the information in the diver's CF 849 and sign on behalf of the DMO;

- (5) Copies of the completed form letter are to be held in the diver's medical and personal files; and
 - (6) This process is not intended to replace the current method and when practical the diver should ensure that logs are signed by the examining DMO.
- b. Under exceptional circumstances a CO may sign the log on behalf of an MO in accordance with SURG GEN direction where no local DMO is available.
5. Naval Reserve personnel who, due to military requirements or geographical location, cannot complete their annual dental examination at a CAF Dental Clinic may have the examination conducted by a civilian dentist IAW NAVRESHQ: 6640-1(N51) 28 July 2005 (NOTAL). The civilian dentist may sign the CF 849 as the examining dental professional. A CAF dentist must review the results at the earliest opportunity.
 6. Qualification courses are to be filled in by the instructor on successful completion of training.
 7. Qualified divers are to produce their diving logs for verification and qualifications upon the request of the Diving Supervisor prior to diving or exposure to pressure.
 8. Diving Supervisors shall NOT permit diving if a diver is out of date medically, dentally and/or physically.
 9. See Figure 1-15 for procedures and abbreviations used in completion of CF 849.

PROCEDURES AND ABBREVIATIONS
CANADIAN ARMED FORCES PERSONAL DIVING LOG CF 849

The following standard is to be used when filling out CF 849.

1. CAF 849 Personal Dive Logs must be quarterly reviewed and signed by CO or delegated dive officer / chief / senior diver and if delegated must be annually reviewed and signed by the CO.
2. All entries must be in blue or black non-soluble ballpoint ink (NOT pencil), with the exception of rescinded/suspended divers in which case red ink is to be used.
3. All boxes are to be completed. Ditto (“”) marks are NOT to be used.
4. Any blank lines are to be stroked through with a solid ink line.
5. All dives using service equipment will be defined as either operational, training or proficiency dives and will comply with rules and regulations contained in the CAF Diving Manual.
6. Recreational dives using civilian diving equipment shall be entered in the REMARKS column as “Civilian Recreational Dive”.
7. Medical examinations are to be entered by the Medical Officer (MO) conducting the examination (ensure log accompanies member to examination). However, a (QL6B) Physician Assistant (PA) may sign for an MO after reviewing the individual medical file.
8. The ID page information is to be completed and correct, showing surname, initials, service number, DOB, current rank (pencil), diver qualification, Unit (pencil), diver’s signature and photograph.
9. Approved fitness test results are to be entered by the evaluating person (ensure log accompanies member to testing).
10. Qualification courses are to be filled in by the instructor on successful completion of training.
11. All CAF divers shall retain their CF 849 for 5 years after their final dive has been entered. For pension claims and other such purposes, it is recommended that the CF 849 be retained for life.
12. Use the instructions and abbreviations in Figure 1-13, Sheet 2 of 2, in completing form CF 849 (CAF Personal Diving Log).

Figure 1-15 (Sheet 1 of 2) Procedures and Abbreviations, CF 849 (CAF Personal Diving Log)

PROCEDURES AND ABBREVIATIONS
CANADIAN ARMED FORCES PERSONAL DIVING LOG CF 849

DATE..... Two digits indicating day of the month, month abbreviated to three letters and year indicated by four digits (e.g. August 3, 2006 is entered as 03 Aug 2006).

LOCATION..... Location of the dive

EQPT USED

AGA Mk II FFMAGA
Canadian Clearance Diving
Apparatus..... CCDA
Canadian Underwater Mine
Countermeasures ApparatusCUMA

Compressed Air Breathing
Apparatus/LITECABA/LITE
Ultra-Lite Surface-Supplied
Diving System..... ULSSDE
Oxygen Rebreather..... S10
Recompression ChamberRCC
Superlite SL17-B Helmet..... SL17

GAS MIX

Compressed Air..... C/A
Oxygen / Helium mix..... O₂He

60% O₂ / 40% N₂ 60/40
40% O₂ / 60% N₂ 40/60
Oxygen..... O₂

LEFT SURFACE (LS)..... The local clock time as read on a 24-hr clock (e.g. 0800). Time is to be recorded in whole minutes as the diver leaves the surface.

LEFT BOTTOM (LB)..... The local clock time as read on a 24-hr clock (e.g. 0800). Time is to be recorded in whole minutes as the diver leaves the bottom.

BOTTOM TIME (BT)..... Numbers indicating the total time in minutes from when the diver leaves the surface to the time the diver leaves the bottom. Only actual BTs are recorded here.

REACHED SURFACE (RS) The local clock time as read on a 24-hr clock (e.g. 13:00). Time is to be recorded as the diver reaches the surface and rounded up to the next whole minute.

TABLE..... CAF Diving Table used for the dive.

D SCHED..... Specified decompression procedure for a given combination of depth/bottom time as listed in a decompression table, i.e. Depth (msw)/BT (min).

DEPTH..... Number indicating maximum depth in msw of dive.

TOTAL TIME OF DIVE (TTD) ... Number indicating total time in minutes from when the diver leaves the surface to when the diver reaches the surface. Includes decompression time, travel time and any delay(s) on ascent.

SURFACE INTERVAL (SI)..... Time (hr:min (00:00)) a diver has spent on the surface following a dive, beginning as soon as the diver surfaces and ending as soon as the diver starts the descent of the next dive.

REPETITIVE GROUP (RG)..... A letter (A – O) relating to the amount of residual nitrogen in the diver upon surfacing after a dive.

REPETITIVE FACTOR (RF)..... A two-digit number (1.0 – 2.0) relating directly to the RG and to the length of the surface interval after a dive. The RF is only required when repetitive diving is conducted.

TASK..... Purpose/description of the dive task/mission.

SIGNATURES..... Signed by Divers and by Diving Supervisor (name and rank).

TOTAL TIME TO DATE..... Aggregate career diving time (hr:min) at the completion of that page.

TOTAL DIVES TO DATE..... Aggregate of career dives at the completion of that page.

Figure 1-15 (Sheet 2 of 2) Procedures and Abbreviations, CF 849 (CAF Personal Diving Log)

RECORD OF DIVING OPERATIONS REGISTRE DES OPÉRATIONS DE PLONGÉE					
Date	Location – Lieu			Eqpt Used – Equip. utilisé	
Gas mix – M. gazeux	LS*	LB*	BT*	RS*	
Table	Schedule – Calendrier	Depth – Profondeur	TTD	SI*	RG*
Task – Tâche / Details		Position: Divers – Poste : Plongeur <input type="checkbox"/>		Standby – En attente <input type="checkbox"/> Supervisor – Superviseur <input type="checkbox"/>	
Divers – Plongeur / Signatures*		Sup Name / Rank – Grade* du sup		Sup Signature / Signature du sup	
Date	Location – Lieu			Eqpt Used – Equip. utilisé	
Gas mix – M. gazeux	LS*	LB*	BT*	RS*	
Table	Schedule – Calendrier	Depth – Profondeur	TTD	SI*	RG*
Task – Tâche / Details		Position: Divers – Poste : Plongeur <input type="checkbox"/>		Standby – En attente <input type="checkbox"/> Supervisor – Superviseur <input type="checkbox"/>	
Divers – Plongeur / Signatures*		Sup Name / Rank – Grade* du sup		Sup Signature / Signature du sup	
Date	Location – Lieu			Eqpt Used – Equip. utilisé	
Gas mix – M. gazeux	LS*	LB*	BT*	RS*	
Table	Schedule – Calendrier	Depth – Profondeur	TTD	SI*	RG*
Task – Tâche / Details		Position: Divers – Poste : Plongeur <input type="checkbox"/>		Standby – En attente <input type="checkbox"/> Supervisor – Superviseur <input type="checkbox"/>	
Divers – Plongeur / Signatures*		Sup Name / Rank – Grade* du sup		Sup Signature / Signature du sup	

Total Time to Date: _____ Total Dives to Date: _____

Temps total de plongées à ce jour : _____ Nombre total de plongées à ce jour : _____

Figure 1-15 (Sheet 1 of 6) Sample CF 849 (CAF Personal Diving Log)

COMMANDING OFFICER REVIEW PAGE PAGE DE RÉVISION DU COMMANDANT	

Figure 1-15 (Sheet 5 of 6) Sample CF 849 (CAF Personal Diving Log)

**PERSONAL DETAILS –
RENSEIGNEMENTS PERSONNELS**

Sumame: _____ Initials: _____
Nom de famille : _____ Initiales : _____

Service Number: _____ DOB: _____
N° de matricule : _____ DDN : _____
(dd/mm/yyyy)
(jj/mm/aaaa)

Rank: _____ Qualification: _____
Grade: _____ *(In pencil – Écrire au crayon)* _____ *(In pencil – Écrire au crayon)*

Unit: _____
Unité : _____
(In pencil – Écrire au crayon)

Signature: _____

**PHOTOGRAPH
PHOTO**

NOTE

Photograph may be a photocopy of the member's CAF identification card (NDI 20), a copy of the spare ID photo taken from the member's Unit Employment Record or Personnel File, or a locally produced digital photograph.

Figure 1-15 (Sheet 6 of 6) Sample CF 849 (CAF Personal Diving Log)

157. CANADIAN ARMED FORCES DIVING INFORMATION TRACKING SYSTEM (CAFDITS)

1. CAFDITS is used to track only military dives performed by a dive team as well as an individual diver's information such as qualifications, medicals, fitness tests, and waivers. CAFDITS centralizes dive and diver information, improves accuracy of data entry/retention and enables the generation of reports.
2. CAFDITS contains the Unit Diving Roster which includes; diver's name, rank, service number, dive qualification, qualification expiry, medical, fitness test, dental, last qualifying dive and remarks. All fields shall be kept up-to-date at all times.
3. A quarterly diving report and Unit Dive Roster shall be maintained using CAFDITS. Each quarter a hard copy of the quarterly diving report shall be signed by the CO, this is not to be delegated.
4. Diving activity by a diver from another Unit will be recorded in CAFDITS by the Unit conducting the dive. Care must be taken to avoid reporting dive times more than once.
5. Ships/Units shall retain signed quarterly reports for a period of 5 years.

158. CF 377 CANADIAN ARMED FORCES COURSE REPORT

1. Form CF 377, Canadian Armed Forces Course Report, shall be submitted for all candidates who attend a diving course IAW instructions contained in DAOD 5031-9.
2. The necessary MITE input shall be actioned by the training establishment on successful completion of a diving course.
3. Candidates who successfully complete a diving course shall be given a Diving Qualification Certificate by the CAF diving training establishment conducting the training.

159. CF 777 UNSATISFACTORY CONDITION REPORT

1. Form CF 777, Unsatisfactory Condition Report (UCR) shall be submitted to identify deficiencies in material, policies and procedures, and identify potential and actual hazards to personnel, material, and property.

160. DIVING GENERAL MEMORANDA (DGM)

1. The prime purpose of DGM is to disseminate diving safety information quickly to all diving authorities and teams. Such information will normally consist of approved policy, procedures and regulations which have not yet been introduced into diving publications or which may be of a temporary nature.
2. DGMs are promulgated by D DIVE S under the authority of the Chief of Defence Staff. Administrative details are as follows:

- a. DGM Identification. Each DGM will be numbered consecutively on an annual basis and given a short title for additional identification (e.g. DGM 2005/06/A, AGA Divers Mask - Safety Alert and Special Inspection);
- b. Action Addressee Indicator:
 - (1) A single letter "action addressee indicator" will be assigned to each DGM serial number to denote the particular diving units and teams affected by the DGM (e.g. DGM 2005/06/A, AGA Divers Mask - Safety Alert and Special Inspection).
 - (2) DGM will be promulgated by message to one of six (6) AIG Action Addressee Indicator Lists (A, B, C, D, E and F) as follows:
 - (i) List A - AIG 1730 - CAF Diving Authorities and Diving Teams;
 - (ii) List B - AIG 1804 - Naval Diving Authorities and Diving Teams;
 - (iii) List C - AIG 1811 - Combat Diving Authorities and Diving Teams;
 - (iv) List D - AIG 1829 - Search and Rescue Diving Authorities and Diving Teams;
 - (v) List E - AIG 1868 - Recompression Chamber Authorities and MCM Diving Teams; and
 - (vi) List F - Limited Distribution (list of classified DGM).
- c. DGM Indexing:
 - (1) D DIVE S will maintain the list of effective DGM, available at the D DIVE S SharePoint Page;
 - (2) This list is to be inserted at the front of the individual DGM file to provide a ready-use index; and
 - (3) As subsequent DGM are promulgated, amendments are to be made to update the Unit's DGM index.
- d. DGM Maintenance:
 - (1) In addition to specific action addresses received, a current file of all List A effective DGM is to be maintained by all AIG 1730 addressees (CAF Diving Authorities and Diving Teams);
 - (2) DGM when received should be inserted into a protective loose-leaf binder and be maintained by the Unit Diving Officer or Team Supervisor when no Diving Officer is available;

- (3) All DGMs shall be signed individually by each diver in the team roster to ensure the content is understood. DGMs shall be readily accessible and available for all personnel in a diving team; and
- (4) DGM files are to be made available for examination during annual diving inspections.

161. DIVING TECHNICAL INSTRUCTION (DTI)

1. The primary purpose of the Diving Technical Instruction (DTI) is to quickly disseminate information to the Diving community of all diving technical defects/malfunctions or cautions of diving equipment used by CAF divers.
2. DMEPM is the OPI for DTI's and is responsible for the content, dissemination, follow-up and cancellation of all DTI's on the D DIVE S SharePoint Page. Diving Technical Instructions are issued for the use of all CAF military diving teams. A DTI includes: the known problem(s), the CAF unit(s) affected, the reference message advising of problem(s), detailed instructions to remedy the problem(s) and the contacts at DMEPM for queries. DTI's can be classified as an Electronic Technical Bulletin to the diving community.

162. DIVING SUPERVISOR'S NO-D LOG/WORKSHEET

1. A Diving Supervisor's No-D Log/Worksheet is to be maintained for all dives conducted in the CAF (see Figure 1-17).
 - a. This activity commences at the start of every dive, as the Diving Supervisor is responsible for keeping an accurate record of dives in progress;
 - b. The worksheet should be reproduced locally and is to be used for all CABA diving;
 - c. The diver shall sign the worksheet after each dive and the Diving Supervisor shall sign the bottom of the worksheet on completion of the dive(s); and
 - d. Ships/Units shall retain the worksheet for a minimum of 5 years.

163. ANNUAL DIVING INSPECTION

1. Annual technical and administrative diving inspections of all CAF diving units shall be conducted by D DIVE S with technical assistance from the Fleet Diving Units IAW CAF Diving DAODs.
2. The Annual Diving Safety/Administrative inspection will normally be conducted within one month of the 1 year anniversary of the previous inspection. Units shall request their annual safety/admin inspection by message to D DIVE S no later than one month prior to the anniversary date of the previous inspection. If Units are unable to meet this requirement, then a formal request for extensions shall be forwarded to D DIVE S.
3. Following Annual Diving Safety/Administrative inspections, CO's are to send response letter within 90 days to D Dive S with the corrective measures to the deficiencies noted during the inspection.
4. If a Unit's dive team changes their status to "ineffective" (i.e. they are unable to conduct diving activities for an extended period of time), they shall advise D DIVE S by message, info FDU and DMEPM.
5. The Annual Diving Safety/Administrative checklist is available on the D DIVE S SharePoint Page.
6. The Annual Technical Maintenance Inspection (TMI) checklist is maintained by the FDUs and is available on request.
7. D DIVE S may grant an extension of up to six months beyond the anniversary of the last Safety/Admin Inspection, when justified by extenuating circumstances, such as operational deployment. Factors to be taken into consideration for requesting this waiver include:
 - a. Size and composition of dive team (e.g. number of dive supervisors, type of dive qualifications);
 - b. Proficiency of team (e.g. date of last dive, date of last requal, medical/dental/physical fitness to dive, number of divers on waivers from formation); and
 - c. Date of last successful air sample and results of last dive safety/admin inspection.
8. Teams which have not had a D DIVE S Safety/Admin inspection in an 18-month period shall be categorized non-effective until such time as the inspection is conducted. D DIVE S will promulgate status changes by message to appropriate chain of command.
9. Extensions more than one month past the anniversary of the previous TMI require the approval of DMEPM 3-4-2, who will consult with D DIVE S as required.
10. Diving operational readiness standards and practical diving evaluations are the responsibility of the respective chain of command.

DIVE INCIDENT INITIAL REPORTING PROCEDURES

164. ACCIDENTS AND INCIDENTS INITIAL ACTIONS

1. In the event of a diving accident or an incident, the Diving Supervisor is to take immediate steps to obtain the services of a Medical Officer, if one is not already in attendance.

2. The Supervisor shall quarantine the equipment as detailed in Article 165 and 166.

3. Following the incident the CO of the Unit conducting the dive shall complete a Diving Accident and Incident 24 Hour Report (DND 4490) located in the D Dive S SharePoint. Once completed email to D Dive S. The primary purpose of the 24 hour report is to transmit the significant facts of the incident, so interim risk mitigation measure can be implanted until the full investigation of the incident is complete.

4. Once the 24 hour report is released the initial actions are complete and the investigation process begins. Refer to B-GG-380-000/FP009 for investigation reporting.

5. The information collected from the quarantined equipment shall be transferred onto Diving Accidents and Incident report Forms (Figure 1-17). Once completed, the lead investigator will take custody of the forms so to be included in the final report.

DND 4480-E	Diving Life Support Equipment Failure Investigation Report
DND 4481-E	Equipment Condition & Action on CABA Recovery
DND 4482-E	Equipment Condition & Action on CCDA / CUMA Recovery
DND 4483-E	Equipment Condition & Action on SSDE Recovery
DND 4484-E	Diving Equipment Analysis Report
DND 4485-E	Diver Medical Report - History
DND 4486-E	Diver - Diagnosis and Treatment Record
DND 4487-E	Equipment Condition & Action on ULSSDS Recovery
DND 4488-E	Equipment Condition & Action on CABA LITE Recovery
DND 4489-E	Diver - Witness Statement
The Diving Accidents and Incidents Report Forms are available online on the Defence Forms Catalogue http://dfc-rfd.mil.ca/	

Figure 1-17 CAF Diving Incident/Accident Report Forms

<p>ACTION ADDRESSEES</p>	<p>NDHQ C Navy/D Dive S, CFLCC Ottawa Formation OLHQ Admin Authority</p>
<p>INFORMATION ADDRESSEES</p>	<ol style="list-style-type: none"> 1. All 24-hr reports: NDHQ/D MIL E or DAR/as appropriate and CFEME TORONTO//CDHM 2. When equipment investigation is required: NDHQ/DMEPM/DNR/DGNRS, CFEME TORONTO / EDU GRP, FDU closest geographically. 3. When specialist medical assistance is required: NDHQ C Navy RCN Surg and CFEME TORONTO//CDHM
<p>FORMAT</p>	<p>Subj: DIVING HAZARDOUS OCCURRENCE 24-HOUR REPORT REF: B-GG-380-000/FP-002</p> <ol style="list-style-type: none"> 1. <u>Type of diving hazardous occurrence (Pick one):</u> <ol style="list-style-type: none"> a. <u>Fatality (F)</u> b. <u>Significant Incident (SI)</u> c. <u>Potential for SIF</u> d. <u>Other – Brief Description</u> <p><u>NOTE: It is mandatory for D Dive S to analyze/investigate should Para 1a – c apply</u></p> <ol style="list-style-type: none"> ii. <u>Significance of an incident is a function of quote severity unquote of the incident and the amount of harm or damage to personnel/equipment/platforms</u> <ol style="list-style-type: none"> 2. Number and condition of personnel involved 3. Equipment involved 4. Date / Time / Location of occurrence 5. Narrative: This must include a detailed description of the occurrence, including all known relevant facts. Also included should be a discussion of possible cause factors and corrective measures. Speculation is not discouraged, however, the originator should clearly indicate in the report what is factual and what is opinion and suspicion. Completeness, candidness and relevance are essential to a useful narrative. 6. Action taken. Information on [personnel] administrative/disciplinary action is not required. Action taken to prevent/reduce recurrence is to be included 7. Assistance required.
<p>PRECEDENCE</p>	<p>The message is to be assigned PRIORITY or higher precedence.</p>
<p>CLASSIFICATION</p>	<p>The message may be unclassified unless information included would be prejudicial to the Service or individuals involved.</p>
<p>SIC</p>	<p>LOL</p>

Figure 1-18 24 Hour Message Format

INCIDENT/ACCIDENT

1. When equipment is recovered after a diving incident, it is initially to be handled no more than is required to remove it from the diver.
2. Without taking any action that may cause loss of gas from the cylinders, the examiner is to record the findings IAW Art. 169.

166. SPECIFIC ACTION TO BE TAKEN UPON RECOVERY

1. **CABA.** Isolate/quarantine cylinders by completing the following steps:
 - a. Isolate equipment;
 - b. All valves found closed shall not be opened;
 - c. The main cylinder supply valve is to be CLOSED;
 - d. The Supervisor must record the number of turns required to close it;
 - e. Note and record any unusual equipment conditions;
 - f. All quarantined equipment is to be securely bagged and sealed bearing in mind the requirement for preservation of evidence until further investigation can be completed by qualified personnel; and
 - g. The breathing apparatus is to be accompanied by gas samples from the storage cylinders used and or source, the samples being clearly marked to show their origin.
2. **AGA MK II FFM:**
 - a. Check and note the condition of the visor, head harness and equalization device;
 - b. Record the position of the gill valve (if applicable) and visually inspect the fittings of the intermediate pressure hose to mask, as well as all fittings on the second-stage regulator housing for obvious signs of improper connection or cross threading;
 - c. Inspect oral/nasal mask and condition of one way valve;
 - d. If a communications system was in use, its position and condition should also be noted; and
 - e. Except for visual inspection, the mask and regulator should not be disassembled in any way and should remain quarantined until inspection by qualified personnel.

165. INSPECTION OF LIFE SUPPORT EQUIPMENT AFTER DIVING

- a. Check the BC for any rips, punctures, or obvious damage to the material. All straps, webbing and stitching must be checked for physical security or signs of failure;
- b. Without releasing the contents of the bladder, visually check all dump valves, the wash-out port and power inflator for physical security as well as for signs of damage;
- c. Condition of any accessory attached, as well as all attachment points, "D"-rings, etc., must also be recorded;
- d. Note status of weights; and
- e. Except for visual inspection, the BC should not be disassembled in any way and should remain quarantined until inspection by qualified personnel.

4. ULSSDS:

- a. Record pressure than close main cylinder. Record number of turns;
- b. Record pressure than close secondary cylinder. Record number of turns;
- c. Record post-dive pressure than close Emergency cylinder;
- d. Note Reserve valve position (Open/Closed);
- e. Note if HUD activated (Yes/No);
- f. Note if anti-freeze cover assembly is complete and undamaged;
- g. Note if audible alarm is functional;
- h. Note if PT regulator is connected and functional (Yes/No);
- i. Note if Octopus is connected and functional (Yes/No);
- j. Note if FFM MKII reserve holder is connected (Yes/No);
- k. Note if Reserve cylinder is correctly attached to rail system (Yes/No);
- l. Wind the high pressure air lifeline hose in figure 8(while pressurized);
- m. Open the vent valves on the adapter hoses. To depressurize faster, use the purge button on the breathing valve or use the white pressure vent handle;
- n. Disconnect the adapter hoses and park them in their parking connections in DP-1 panel box; and

- o. Pack HP Life Line as it is. Do not Rinse.

167. REPORTING OF DECOMPRESSION SICKNESS

1. All cases of decompression sickness require a report. This provides data for analyzing the safety of decompression tables and the effectiveness of treatment procedures. It also supplies valuable information on a variety of other diving hazards. Analysis of the reports is important in the continuous effort to improve diving practices and to increase diving safety generally.

2. In the case of a serious decompression sickness occurring in Canada, the services of the Consultant in Diving and Hyperbaric Medicine located at Defense Research and Development Canada - Toronto (DRDC - Toronto) are available to advise on the recompression treatment or to correlate previous diving history with respect to recompression treatment (Article 239). Refer to page i/ii, Diving Emergency Assistance/Medical Consultation, for contact information.

DIVING INCIDENT/ACCIDENTS INVESTIGATION**168. GENERAL**

1. Diving is an inherently dangerous activity, requiring the use of complex equipment and procedures to mitigate the effects of a hostile environment in carrying out operational tasks. In many circumstances the margin of safety for the diver is small, and a procedural error or equipment failure can rapidly lead to injury or death. Consequently, it is expected that there will be diving accidents from time to time. A thorough understanding of the causal factors can reduce the frequency and severity of accidents, and may enable corrective measures to be developed. Experience gained in the investigation of safety issues in other hazardous environments has proven that an investigation oriented towards safety and prevention and not towards blame or the finding of individual responsibility is the most effective means of unearthing the causes, which can then be disseminated in the form of lessons learned. All aspects of the diving investigations dealt with under the authority of the CAF Diving Manuals adhere to this principle.

2. All investigations and reporting shall be carried out IAW B-GG-300-000/FP-009, CAF Diving Incident/Accident Investigation & Reporting writing Manual.

169. NECESSITY TO REPORT

1. Considerable importance is attached to the study of incident and accidents experienced by divers in all types of diving equipment. The analysis of accurate data recorded shortly after an actual or simulated dive in which injury has occurred or could have occurred owing to failure of equipment or procedure is an important factor in the future safety of divers.

170. INCIDENT REPORTING

1. Once initial actions have been completed with the transmission of the 24 Hour report, the investigation ensues in which a report is produced.

2. Serious accidents often result from the combination or interaction of numerous separate causal factors. Taken individually, they may seem unimportant, but the identification and elimination of these individual factors before they combine to cause an accident is nevertheless an important method of accident prevention.

3. Any diving-related incidents experienced including those which could have led to an accident if undiscovered or left un-investigated requires reporting. All CAF diving units SHALL produce a report IAW B-GG-380-000/FP-009 within 60 days of the incident and the report will be and mail mailed to the Director Diving Safety (D DIVE S). This includes but is not limited to the following situations:

- a. Death, or injury;
- b. Convulsions or serious impairment of consciousness during or after a dive;
- c. Decompression illness of any kind;

- d. Embolism;
 - e. Any serious mishap, even though the diver escapes actual injury;
 - f. An incident that renders suspect any equipment or procedure;
 - g. Barotrauma;
 - h. Any equipment or tactic, technique or procedure (TTP) rendered suspect;
 - i. Defects identified during maintenance and Pre/Post dive procedures; and
 - j. Potential for decompression illness e.g. omitted decompression.
4. D DIVE S will analyze these incidents and may promulgate information via the DGM format as required to advise other units of potential problem areas. Changes to procedures and/or equipment will also be disseminated.
5. For purposes of safety only, D DIVE S will also accept anonymous information concerning diving-related incidents. This information will require independent confirmation before any action is taken. However, sources will not be divulged.

ANNEX A DEFINITIONS APPLICABLE TO CAF DIVING**Attendant**

A Service member qualified in diving who keeps continuously in hand a lifeline attached to a diver or continuously watches a float or marker attached to a diver or swimmer.

Attended Diving

Diving in any equipment wearing a lifeline (or umbilical designed to serve also as a lifeline) and tended by an attendant.

Combat Diving

A swimming or diving activity carried out by combat divers in a tactical setting using underwater breathing apparatus.

Combat Swimming

A tactical operation in which swimmers do not use underwater breathing apparatus.

Current Diver

Qualified CAF diver, knowledgeable and who has dived with CAF diving equipment associated to qualification within their required currency.

Diving Cycle

A diving cycle is defined as been employed as a diver and/or standby diver and/or dive supervisor (if applicable).

Float Diving

Diving in CABA wearing a lifeline secured to a float of sufficient buoyancy to support the diver(s) in their heaviest condition. **Restricted to max depth of 30 msw.**

Free-swimming in Pairs (with Buddy Line)

Divers operating in pairs, unmarked and unattended, but attached to each other but with a supervisor and standby diver in the vicinity.

Free-swimming in Pairs (Without a Buddy Line)

Divers operating in pairs, unmarked and unattended and not attached to each other but with a supervisor and standby diver in the vicinity.

Free-swimming Solo

One diver operating unmarked and alone, but with a supervisor and standby diver in the vicinity.

"In-date" Diver

A Service member who possesses a CAF Diving qualification, who has completed an applicable diving medical, dental and authorized fitness test within the preceding 12 months and is a "Current Diver". Evidence that a diver is "in-date" should be taken from the diver's log.

Jackstay

A line, rope or wire used to guide divers in an underwater search.

Marked Swimming

Underwater swimming using fins and wearing a light line secured to a light marker at the surface. The line shall be of sufficient length to reach the maximum planned depth of water.

Marked Swimming in Pairs

Underwater swimmers operating in pairs, attached to each other by a buddy line with the lead diver wearing a light line secured to a light marker at the surface. The line shall be of sufficient length to reach the maximum planned depth of water.

Non-diver Attendant

A Service member not qualified in diving but fully conversant with the use of diving signals and the handling of a lifeline. Continuously keeps in hand a lifeline attached to a diver or continuously watches a float or marker attached to a diver or swimmer.

Occupational CAF Diver

A trade in the CAF which the member is considered to be a professional diver or a trade which requires a diving certification to carry out assigned duties. Occupational CAF Divers are Clearance Divers, Port Inspection Divers, and SAR TECHs.

Omitted Decompression

The time omitted from decompression from the appropriate CAF Diving Table.

On Site

The proximity of a hyperbaric chamber that enables a diver to leave their last in-water stop (i.e. 9 msw or the bottom for No-D dives), surface and reach the first chamber stop within seven minutes.

Open Water Diving

Diving in waters in which the swell, wave height or state may cause difficulty to surfaced divers wearing breathing apparatus. It includes conditions under which the supervisor may lose sight of surfaced divers or have difficulty locating lost divers on the surface.

Proficient Diver

Qualified, knowledgeable and worked-up in a specific piece of diving equipment related to the diver's qualification (for CABA: a minimum of 6 diving cycles within the last 90 days).

Redundant Breathing System

A breathing system that functions independently from the primary system and may be used by the diver in emergency when the primary system has failed. Its use requires positive actions such as opening valves or switching mouthpieces or masks.

Reserve Breathing Supply

A portion of the breathing media available to the diver, which is mechanically kept in reserve and may be used by the diver in emergency when the primary supply is depleted. Its use requires a positive action such as opening a valve.

Search Group Swimming

Two or more divers engaged in searching, all of whom are attached to the same light line. Only search methods published in this manual are included under this term.

Standby Diver

A safety diver deployed as directed by the supervisor to render assistance to other divers. The Standby diver must be fully qualified in the equipment being used and to the maximum depth of the dive.

Standby Regulator

A CABA regulator equipped with one first-stage and two second-stages.

Sub-Occupational CAF Diver

A diver whose primary trade is not diving related but volunteers to perform diving duties to support specific diving requirements of the Ship or Unit. Sub-Occupational CAF Divers are Combat Divers and Ship's Divers.

**ANNEX B ABBREVIATIONS AND ACRONYMS APPLICABLE TO CAF
DIVING**

ABN	Abnormal
ADC	Army Dive Centre
ADMO	Advanced Diving Medical Officer
AGE	Arterial Gas Embolism
AO	Area of Operations
ata	Atmosphere Absolute
AUMB	Aerospace and Underwater
BA	Breathing apparatus
Bar	SI unit of pressure (= 105 Pa, or 14.5 psi)
BCD	Buoyancy Compensator Device
BOI	Board of Inquiry
BT	Bottom Time
CABA	Compressed Air Breathing Apparatus
CAF	Canadian Armed Forces
CAFDITS	Canadian Armed Forces Diving Information Tracking System
CAFFSAT	Canadian Armed Forces School of Survival and Aeromedical Training
CAFHSGD	Canadian Armed Forces Health Services Group Directive
CAFICC	Canadian Armed Forces Integrated Command Centre
CAFPD	Canadian Armed Forces Publication Depot
C Air Force	Chief of the Air Force Staff
CANFLTLANT	Canadian Fleet Atlantic
CANFLTPAC	Canadian Fleet Pacific
CBI	Compensation and Benefit Instructions
CBTO	Combat Diving Officer
CBTS	Combat Diving Supervisor
CCDA	Canadian Clearance Diving Apparatus
CDHM	Consultant Diving and Hyperbaric Medicine
CDM	Consultant in Diving Medicine
CDO	Clearance Diving Officer
CEM	Chief Engineering and Maintenance
CFTO	Canadian Forces Technical Order
CHS	Chief Health Services
CJMCC	Canadian Joint Maritime Component Commander
CL DVR	Clearance Diver
CLS	Chief Land Staff
C Navy	Chief of the Naval Staff
C Navy	Commander RCN
C Navy RCN Surg	RCN Surgeon
CNS	Central Nervous System
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COP	Contingency Operations Plan
CPR	Cardio-pulmonary Resuscitation
CSA	Canadian Standards Association

CSG	Canadian Support Group
CUMA	Canadian Underwater Mine Countermeasures Apparatus
D DIVE S	Director Diving Safety
D MIL E	Director Military Engineering
DAODs	Defence Administrative Orders and Directives
DAR	Director Aerospace Requirements
DC	Decompression computer
DCDS	Deputy Chief of Defence Staff
DCS I	Decompression Sickness Type I
DCS II	Decompression Sickness Type II
DGM	Diving General Memorandum
DGMEPM	Director General Maritime Engineering and Program Management
DGNSR	Director General Naval Strategic Readiness
DTI	Diving Technical Instruction
DTR	Dive Team Resuscitator
EBT	Effective Bottom Time
ED	Effective depth
EDUG	Experimental Diving and Undersea Group
EOD	Explosive Ordnance Disposal
EOR	Explosive Ordnance Reconnaissance
Eps	Emergency procedures
FDU	Fleet Diving Unit
FFM	Full Facemask
Frag O	Fragmentary Order
GNCS	Group Navigation Control System
HCW	Heavily Contaminated Water
He	Helium
HHG	Health Hazards Group
HP	High pressure
HQ	Headquarters
HW SUIT	Hot Water Suit
IAW	In Accordance With
ID	Identification
IP	Intermediate Pressure
ITMIS	Individual Training Management Information System
JOA	Joint Operations Area
JSG	Joint Support Group
JTF	Joint Task Force
Km/h	Kilometers Per Hour
kPa	Kilopascals
LB	Left Bottom
LMDE	Limpet Mine Disposal Equipment
LOC	Lines of Communication
LP	Low Pressure
LS	Left Surface
MARLANT	Maritime Forces Atlantic
MARPAC	Maritime Forces Pacific

MCDV	Maritime Coastal Defence Vessel
MCM	Mine Countermeasures
MCW	Moderately Contaminated Water
MOS	Military Occupation Structure
mpm	Metres Per Minute
MSEO	Marine Systems Engineering Officer
Msw	Metres of Seawater
N ₂	Nitrogen
NATO	North Atlantic Treaty Organization
NAVORD	Naval Command Order
NDHQ	National Defence Headquarters
NFR	Naval Fleet Requirement
No-D	No Decompression
NOK	Next of Kin
NOR	Normal
O ₂	Oxygen
OCI	Office of Collateral Interest
OJTs	On-the-job Training
Omitted-D	Omitted Decompression
OOW/OOD	Officer of the Watch/Officer of the Day
OP O	Operations Order
OPI	Office of Primary Interest
OPLAN	Operations Plan
OPSEC	Operations Security
OS	Ordinary Seaman
OTV	Overtaken Vessel
PA	Physician's Assistant
PA	Public Affairs
PAAC	Personal Auxiliary Air Cylinder
PDR	Post-Deployment Report
PFD	Personal Flotation Device
PID	Port Inspection Diver
POC	Point of Contact
POs	Performance Objectives
POS	Pulmonary Over Inflation Syndrome
ppm	Parts per Million
ppN ₂	Partial Pressure of Nitrogen
ppO ₂	Partial Pressure of Oxygen
PTSD	Post-traumatic Stress Disorder
QHM	Queen's Harbour Master
QR&Os	Queen's Regulations and Orders for the Canadian Armed Forces
RB	Reached Bottom
RCC	Recompression Chamber
Recce	Reconnaissance
RF	Repetitive Factor
RG	Repetitive Group
RS	Reached Surface

SAAC	Survivor Auxiliary Air Cylinder
SAR	Search and Rescue
SAT	Satisfactory
SBA	Side Block Assembly, LWSSDE
SCF	Standard Cubic Feet
SI	Summary Investigation
SI	Surface Interval
SI	Système Internationale (Metric System)
SITREP	Situation Report
SN	Service Number
SOPs	Standard Operating Procedures
SPG	Submersible Pressure Gauge
SME	Subject Matter Expert
SMM	Standard Manoeuvre Manual
SSBA	Surface-supplied Breathing Apparatus
STANAG	Standardization Agreement
STBY	Standby Diver
SD	Ship's Diver
SDO	Ship's Diving Officer
SDS	Ship's Diving Supervisor
SUPLAN	Supporting Plan
Sur D	Surface Decompression
Sur DO ₂	Surface Decompression With Oxygen
TBT	Total Bottom Time
TDT	Total Dive Time
TF	Task Force
TRSET	Transport and Rescue Standardization and Evaluation Team
TT5	Oxygen Treatment Table 5
TT6	Oxygen Treatment Table 6
TUP	Transfer Under Pressure
U/W	Underwater
UCR	Unsatisfactory Condition Report (CAF 777)
UN	United Nations
UNSAT	Unsatisfactory
VVDS	Variable Volume Dry suit
VV(s)	Valve(s)
Wng O	Warning Order

**ANNEX C ORDERS AND REFERENCE PUBLICATIONS PERTAINING TO
CAF DIVING**

A-PD-055-001/AG-001, Canadian Armed Forces Manual of Military Occupational Structure

ADIVP-1 (Navy), Allied Guide to Diving Operations ADIVP-2 (Navy), Allied Guide to Diving Medicine ATP-10 (D), Search and Rescue

B-GG-380-000/FP-001, Canadian Armed Forces Diving Manual, Volume 1, History, Physics and Physiology

B-GG-380-000/FP-002, Canadian Armed Forces Diving Manual, Volume 2, Organization, Regulations, Rules and Compressed Air Breathing Apparatus (CABA) Diving

B-GG-380-000/FP-003, Canadian Armed Forces Diving Manual, Volume 3, Surface-Supplied Diving Manual

B-GG-380-000/FP-004, Canadian Armed Forces Diving Manual, Volume 4, Self-Contained Mixed-Gas Diving, Book 1 of 3, Canadian Clearance Diving Apparatus (Version 2) (CCDA [V2])

B-GG-380-000/FP-004, Canadian Armed Forces Diving Manual, Volume 4, Self-Contained Mixed-Gas Diving, Book 2 of 3, Canadian Underwater Mine Countermeasures Apparatus (Version 2) (CUMA [V2])

B-GG-380-000/FP-004, Canadian Armed Forces Diving Manual, Volume 4, Self-Contained Mixed-Gas Diving, Book 3 of 3, S-10 Oxygen Rebreather Apparatus (S-10)

B-GG-380-000/FP-005, Canadian Armed Forces Diving Manual, Volume 5, Hyperbaric Chamber - Operation and Treatment Procedures

B-GG-380-000/FP-006, Canadian Armed Forces Diving Manual, Volume 6, Diving Supervisor's Handbook (English)

B-GG-380-000/FP-007, Manuel de Plongée des Forces Armées Canadiennes, Volume 7, Aide-Mémoire du Superviseur de Plongée (Français)

B-GG-380-000/FP-008, Manuel de Plongée des Forces Armées Canadiennes, Volume 8, Organisation. Consignes. Règles et Appareil Respiratoire à Air Comprimé (ARAC) (Français)

B-GG-380-000/FP-009, (Draft) Directorate of Diving Safety Incident Investigation Manual

B-GL-361-007/FP-001, Combat Diving

C-03-005-033/AA-000, Naval Engineering Manual, Part 17, Section 9 - "Compressed Air Systems"

C-87-10-10 /MS-003, Operating and Maintenance Manual, Divers' HP Air Compressor NSN 4310-21-869-3745 (Gasoline Engine-Driven) NSN 4310-21-869-3746 (Electric Motor-Driven)

C-87-10-11 /MS-001, Care, Inspection, and Testing of Aluminum Diving Air Cylinders

C-87-011-000/TB-001, Divers' Breathing Air Compressor Lubricating Oils

C-87-020-001/NG-001, Special Test Instructions: Divers' Breathing Air Analysis

C-87-117-000/MS-001, Operating and Maintenance Instructions, YDT-11 Recompression Chamber, Fleet Diving Unit (Pacific)

C-87-167-000/MS-001, Operation and Maintenance Instructions, Hydraulic Divers' Tools

C-87-223-000/MS-000, Operating and Maintenance Instructions for the DUOCOM Transportable Recompression Chamber

C-87-226-000/MS-001, Operating and Maintenance Instructions, YDT-12 Recompression Chamber

C-87-229-000/MS-002, Operating and Maintenance Instructions, Mobile (SUBSAR) Recompression Chamber (Atlantic)

C-87-230-000/MS-002, Operating and Maintenance Instructions, Mobile (SUBSAR) Recompression Chamber (Pacific)

C-87-252-000/MS-000, Operating and Maintenance Instructions, Fleet Diving Unit (Atlantic) Main Recompression Chamber

C-87-273-000/MF-001, Maintenance Instructions, AGA Mk II Diving Mask, NSN 4220-21-903-1913

C-87-280-000/MS-001, Operating and Maintenance Manual, SUBSMASH Compressed Air Storage and Supply Unit

C-87-287-000/MS-001, Operating and Maintenance Instructions, Fleet Diving Unit (Pacific) Main Recompression Chamber

C-87-303-000/MS-001, Operating and Maintenance Instructions for FDU(P) Main Diving Gas Supply and Distribution

C-87-304-000/MS-001, Operating and Maintenance Instructions for FDU(A) Main Diving Gas Supply and Distribution

C-87-325-A00/MS-001, Operating and Maintenance Instructions, Containerized Diving System Recompression Chamber

C-87-325-B00/MS-001, Operating and Maintenance Instructions, Containerized Diving System Workshop Container

B-GG-380-000/FP-002

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C-87-362-000/MS-001, Corrective Maintenance Instructions and Parts Lists for the Canadian Clearance Diving Apparatus (Version 2) (CCDA [V2])

C-87-363-000/MS-001, Corrective Maintenance Instructions and Parts Lists for the Canadian Underwater Mine Countermeasures Apparatus (Version 2) (CUMA [V2])

C-87-E22-000/ML-001, Canadian Armed Forces Buoyancy Compensator (BC 1)

C-87-E22-000/NY-001, Naval Preventative Maintenance Schedule Canadian Armed Forces Buoyancy Compensator (BC 1)

C-87-E22-000/NY-Z01, Naval Preventative Maintenance Schedule Canadian Armed Forces Buoyancy Compensator (BC 1)

C-87-E15-000/NY-001, Naval Preventive Maintenance Schedule Ultra Lightweight Surface Supply Diving System (ULSSDS)

C-87-011-000/TB-001, Technical Bulletin Divers Breathing Air Compressor Lubricating Oil

C-87-E15-000/MS-002, Description De Service De Maintenance Pour Le Système Ultraléger D'approvisionnement D'air De Surface Pour Plongée (SUAASP) French

C-87-112-000/NY-001, Naval Preventive Maintenance Schedule - Compressor Unit, Reciprocating (Electric- Driven) - Metric Applicable To CPF, PTR, TRL Classes and FDU(A)(P)

C-87-112-000/NY-Z01, Naval Preventive Maintenance Schedule - Compressor Unit, Reciprocating (Electric-Driven) Applicable To PTR, TRL Classes and FDU (A)

C-87-112-000/TB-001, Technical Bulletin - (Marine) - Instruction to Naval Reserve Units for Carrying Out Planned Maintenance Routines on Diving Compressors

C-87-235-000/NY-001, Naval Preventive Maintenance Schedule (Engineering) Kodiak 360 Dry Suit Applicable to All HMC Ships, FDU's, DHTC, PID, EDU, SAR Units and Combat Divers

C-87-235-000/NY-Z01, Naval Preventive Maintenance Schedule (Engineering) Kodiak 360 Dry Suit Applicable to All HMC Ships, FDU's, DHTC, PID, EDU, SAR Units and Combat Divers

CAF Recreation SCUBA, CAF Sport and Recreational Diving Club Policy

CAF Scale D01-312, Personal Loan Issues to CAF Divers

CBI 205.34, Diving Allowance

CBI 205.345, Casual Diving Allowance

CFAO 55-10, Award of Special Badges

B-GG-380-000/FP-002
CFHS Order 4000-04, CAF Health Services Orders, Diver's Medical Standard

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CFHS Order 7100-01, CAF Health Services, Osteonecrosis Survey

DAOD 5045-0, CF Personnel Support Programs, Interim Water Safety Policy

DAOD 8009-0 and 8009-1, CAF Diving

D-87-03-00 /SG-001, Purity of Compressed Breathing Air and Gases for Divers

D-87-03-01 /SF-000, Specification for Soda Lime used for the Removal of Carbon Dioxide in Underwater Breathing Apparatus

LMDE Addendum

NAVORD, Vol. 1, 9-12, Naval Reserve Diver Training

NAVORD, Vol. 1, 36-6, Diving and Air Material Supply Procedures

NAVORD, 46-500, Diving - Operational

NAVORD, 46-501, Diving - Training

1 CAD/TRSET, Standard Operating Procedures for Confined Space Rescue Diving, 2015-08-27

1 CAD/TRSET, Change 3, 2005-04-19, Guidelines for Survivor Extraction from Capsized Vessels

RCAF, Flight Operations Manual (FOM)

ANNEX D Check-Out Dive proceduresActions List A

Diving Equipment Preparation	Yes	No	Remarks
Gauges cylinders			
Inspects regulator			
Inspects Buoyancy compensator (BC)			
Inspects weight pouch (Loads weight)			
Attach cylinder to BC Tank valve orientated correctly Tank straps tight			
Attach regulator to cylinder Attach BC whip to inflator Slowly turns on air Checks air pressure Fully inflates BC Checks all dumps			

Check Out Dive	Yes	No	Remarks
Diver dress correct Hood Fins Mask Gloves Depth Gauge BCD Weights inserted Regulator (Cylinder Open) Knives Lifeline correct			
Full face mask clearing drill conducted			
Switch to alternate regulator Don half mask			
Blow up drill conducted Disconnects suit/ BCD inflation Makes safe ascent			
Buddy breathing drill conducted			
Stricken diver drill conducted (IAW B-GG-380-000/FP-006)			

Supervisor Check Out Dive	Yes	No	Remarks
Checks water depth			
Calculates repet dives (if applicable)			
Conducts Dive Brief Wx/tides/currents Confirms diver fitness/Med/Dent Task Planned depth/schedule Hazards Discuss emergency procedures Discuss casualty evacuation			
Conducts supervisors checks			
Completes Diver Supervisor Log Record left surface Record Reach surface Record max depth Calculate repet group Signs log			
Post dive debrief Confirms divers are well Gives repet groups			

Complete Rules and Regulations Review	Yes	No	Remarks
Read chapter 1			
Read chapter 2			
Diving Officer to confirm comprehension Responsibilities of: CO Diving Officer Diving Supervisor Diver Stby Diver Stby Diver states of readiness Currency Rescinding Suspending Ship/Cbt Diver depth limits Lifeline specs Alcohol and cannabis policy Number of personal required for a dive CABA quarantining procedures Diving signals			
Dive Tables Review			
Read Chapter 3 Art 308 - 313			
Complete tables review found here: Tables review			

Diving Equipment Preparation	Yes	No	Remarks
Gauges cylinders			
Inspects regulator			
Inspects Buoyancy compensator (BC)			
Inspects weight pouch (Loads weight)			
Attach cylinder to BC Tank valve orientated correctly Tank straps tight			
Attach regulator to cylinder Attach BC whip to inflator Slowly turns on air Checks air pressure Fully inflates BC Checks all dumps			

Check Out Dive (Pool and camber)	Yes	No	Remarks
Diver dress correct Hood Fins Mask Gloves Depth Gauge BCD Weights inserted Regulator (Cylinder Open) Knives Lifeline correct			
Full face mask clearing drill conducted			
Switch to alternate regulator Don half mask			
Blow up drill conducted Disconnects suit/ BCD inflation Makes safe ascent			
Buddy breathing drill conducted			
Stricken diver drill conducted (IAW B-GG-380-000/FP-006)			

Supervisor Check Out Dive (Pool and camber)	Yes	No	Remarks
Checks water depth			
Calculates repet dives (if applicable)			
Conducts Dive Brief Wx/tides/currents Confirms diver fitness/Med/Dent Task Planned depth/schedule Hazards Discuss emergency procedures Discuss casualty evacuation			
Conducts supervisors checks			
Completes Diver Supervisor Log Record left surface Record Reach surface Record max depth Calculate repet group Signs log			
Post dive debrief Confirms divers are well Gives repet groups			

PROTECTED A
(when complete)

CHECK-OUT DIVE FORM

Service Number

Rank Name and Initials

Task:

Date:

Strengths:

Areas for Improvement:

Date

Member Signature

Dive Supervisor

Dive Officer Comments:

Signature

Commanding Officer Comments:

Signature

PROTECTED A
(When completed)

ANNEX E CAFDTMK CONTENTS

NSN	Item Name	Description	UI	Qty
6510-21-116-0154	Bandage Elastic Adhesive Back 7.5 cm x 4.6 m Rolled	Bandage Elastic Adhesive Back 7.5 cm x 4.6 m Rolled, Skin Colour, One Side Coated With Adhesive Backing	EA	1
6510-01-586-4314	Bandage Trauma 20 in. x 20 in.	Bandage, Pad, Non-adherent, 20 in. x 20 in., with Attached Elastic Strap for Traumatic Amputations, Burns and Large Pattern Wounds	EA	1
6510-21-849-8650	Bandage, Adhesive	4 ply Absorbent Gauze Pad; Sterilized; Elastic Cloth Backing; 3.8 cm Wide; 7.5 cm Long; Box of 100; Brand: Covoplast Knuckle Dressings	BX	0.25
6510-cf-002-0901	Bandage, Adhesive, Blister Prevention And Treatment, Latex-free, Sterile, Small	Bandage, Adhesive, Blister Prevention and Treatment, Latex-free, Sterile, Translucent, 1.5 in. x 2.4 in. Oval	EA	2
6510-21-851-4200	Bandage, Compress, Sterile, 10 cm x 10 cm (4 in. x 4 in.) pg(10)	10.1 x 213.3 cm, Compressed, with 10.1 x 10.1 cm Compress, Individually Wrapped in Envelope	EA	3
6510-01-558-3342	Dressing Modular 4 in.	Dressing, Modular, 4 in., w/ Pressure Gauge, Latex-free	EA	3
6510-CF-001-7793	Dressing Strip 4 cm x 5 m	Bandage AHD (4-p) Gauze Pad 4.0 cm x 5.0 m Strip Form of Elastic Adhesive Plaster Faced With Plastic Flesh Color	RO	1
6510-01-621-1129	Dressing, Chest Seal Wound, Non-valved	Dressing, Chest Seal Wound, Non-valved	EA	2
6510-01-606-7097	Dressing, Chest Seal Wound, Valved	Dressing, Chest Seal Wound, Valved	EA	2
6510-21-899-4382	Dressing, Transparent Gel Kit	Nonsterile; 96% Water and 4% Polyethylene Oxide; 7.5 cm x 16.25 cm; Package of 2 Moist Pads; Spenco Medical Corp #47-209	PG	1
6510-CF-001-9836	Pad, Chlorhexidine .5%/ Alcohol 70%	Pad Impregnated with Isopropyl Alcohol 70% and Chlorhexidine 0.5% Individually Sealed 200 ea/box	EA	0.5
6510-21-116-0202	Pad, Non-adherent	7.5 cm W x 10.1 cm Lg, Telfa; Strip Form; Perforated Plastic Film with Absorbent Cotton Backing; White Color; Individually Sealed in Envelope	EA	10
6510-21-860-8464	Skin Closure, Adhesive, Surgical	6.3 mm W x 7.6 cm Lg; Strip of Adhesive Plaster with Fiber Backing, Sterile Packaged in Envelope, Three Strips per Envelope; Box of 50 Envelopes	BX	1

(Sheet 1 of 4) CAFDTMK Contents

NSN	Item Name	Description	UI	Qty
6515-21-878-1120	Airway, Pharyngeal	Guedel Design, Transparent Resilient Polyvinyl. Child Size 2, 68 mm	EA	1
6515-21-878-1122	Airway, Pharyngeal	Guedel Design, Transparent Resilient Polyvinyl. Adult Size 4, 90 mm	EA	1
6515-21-884-3180	Airway, Pharyngeal	Guedel Design, Transparent Resilient Polyvinyl. Child Size 3, 80 mm	EA	1
6515-21-884-3181	Airway, Pharyngeal	Guedel Design, Transparent Resilient Polyvinyl. Infant Size 1, 60 mm	EA	1
6515-21-884-3182	Airway, Pharyngeal	Guedel Design, Transparent Resilient Polyvinyl. Adult, Size 5, 100 mm	EA	1
6515-CF-002-7569	Cannula Nasal 7 ft O2	Cannula, Nasal, Flare Tip, 7 ft Crush Resistant Oxygen Tubing, Adult Size, with Angulated Flexible Lip Plate	EA	1
6515-01-452-5833	Connector, Ventilator	Plastic; Large Tubing; Standard 22 mm O.D Connection; Disposable	EA	1
6515-00-337-2400	Forceps, Splinter	Corrosion Resistant Steel, Straight, Fine Serrated Pointed Tips, 8.5 cm to 10.1 cm Lg	EA	1
6515-cf-002-7589	Glove Ex Nit LF PF NS Lg	Glove, Exam, Nitrile, Latex-Free, Powder- Free, Non-Sterile, Extended Cuff, Stretchy Material, Large	BX	0.4
6515-CF-002-8539	Kit, Temperature Monitoring, Continuous	Kit, Temperature Monitoring, Continuous, Audible and Visual Alarms with Case	EA	1
6515-CF-002-1607	Mask Oxygen (Adult)	Mask, Oxygen, Non-Rebreather, Adult, Vinyl, w/Safety Vent, w/ 7ft Tubing.	EA	1
6515-21-904-7049	Mask, Mouth, Resuscitator	Mask, Mouth Resuscitator "Prosafe" # to Fit Adult and Child, Reusable, Comes with strap and One-way Disposable Valve (O2) Assembly	EA	1
6515-CF-002-8619	Pads, Heat, Oxygen Activated, Set of 4 Used with Blanket 6532-01-524-6932	Pads, Heat, Oxygen Activated, Set of 4 Used with Blanket 6532-01-524-6932	SE	1
6515-CF-002-6004	Pouch Empty Nylon Window	Pouch, Empty, Black Nylon, Clear Plastic Window, 7 in. x 9 in. x 3 in., YKK Nylon Zipper (5 cm Wide), Black Nylon Webbing (1 in. and 2 in. Wide)	EA	1
6515-CF-002-7984	Pulse Oximeter Wireless	Pulse Oximeter, Wireless, Finger Tip, Colour Display, Displays SpO2 and Heart Rate, Comes with Carrying Case, Lanyard and Batteries	EA	1

(Sheet 2 of 4) CAFDTMK Contents

NSN	Item Name	Description	UI	Qty
6515-CF-001-9074	Resuscitator Disposable Adult	AMBU Medibag Adult. MDI Single Patient Use Resuscitator with Oxygen Tubing, Reservoir Bag and MediPort with Medium Adult Mask. SM Part No. 450611000 - 107.94/CA of 6	EA	1
6515-CF-001-9774	Oxygen Rescue PAK Delivery System	DAN 02	EA	1
6515-CF-002-8555	Scalpel Disp 11 Safety Shield	Scalpel, Bard-Parker Design, Size 11, Stainless Steel, Disposable with Locking Retractable Safety Shield and No Slip Grip	EA	2
6515-21-878-1957	Scissors, Universal	Almedic Design; Stainless Steel, Acid Proof, Blunt Ends, Serrated Edges, with Plastic Covered Finger Rings, Accessories: Holster (6515-21-878-1958)	EA	2
6515-21-903-0672	Splint, Universal	"Quick Splint" Malleable; Light Weight Aluminum; Coated with Foam; 900 mm Lg x 110 mm W x 5 mm thick Overall; Radiolucent; Can Be Cut with Scissors	EA	2
6515-CF-002-7539	Suction DVC Tact Airway	Suction Device, Tactical, Airway, 1000 ml Bag, 100 mm Hg Vacuum Force Double Valved, Contoured Suction Top	EA	2
6515-21-877-1517	Tubing Assembly, Plastic, Oxygen Inhalation	2.10 m Lg Overall; Used with: Cannula (6515-21-894-0036)	EA	1
6515-CF-001-6515	Valve One-Way	Valve One-way Replacement Mask U/W (6515-21-904-7049) Mouth Resuscitator	EA	1
6532-01-524-6932	Blanket Casualty Hypothermia w/ 4 Heat Pads	Blanket, Casualty, Hypothermia Prevention & Management with 4 Oxygen Activated Heat Pads, Vacuum Sealed, 3 in. x 9 in. x 12 in.	EA	1
6545-CF-002-0271	Kit, Oropharyngeal Airways (OPA's) 8 Airways Sizes: 40 mm to 110 mm	Kit, Oropharyngeal Airways (OPA's) 8 Airways Sizes: 40 mm to 110 mm, in Plastic Orange Case, Colour Coded	EA	1
6545-20-A0M-1004	Kit, TMT, C.A.F. Dive Team C- Spine Immobilization	Kit, TMT, C.A.F. Dive Team C-Spine Immobilization	KT	1
6760-01-491-2710	Case, Pelican 1550, Orange with Foam	Case, Pelican 1550, Orange with Foam, Lockable, 18.4 in. x 14 in. x 7.6 in.	EA	1
6515-CF-002-8619	Pads, Heat, Oxygen Activated, Set of 4 Used with Blanket 6532-01-524-6932	Pads, Heat, Oxygen Activated, Set of 4 Used with Blanket 6532-01-524-6932	SE	1
6515-21-903-0672	Splint, Universal	"Quick Splint" Malleable; Light Weight Aluminum; Coated with Foam; 900 mm Lg x 110 mm W x 5 mm thick Overall; Radiolucent; Can Be Cut with Scissors	EA	2

(Sheet 3 of 4) CAFDTMK Contents

NSN	Item Name	Description	UI	Qty
6515-01-452-4435	Support, Cervical	Extrication Collar; Adjustable to Four Sizes - Tall, Regular, Short, and No-neck; Brand - Laerdal Stifneck Select; One Size Fits All	EA	2
6530-CF-001-7724	Board Spinal "Baxstrap"	Board Spinal Fracture "Baxstrap"TMPlastic 2, 500 lbs Distributed Weight. Laerdal # 98-25-00	EA	1
6530-CF-001-7725	Restraint Fast Patient	Restraint Harness, Fast Application Version, with 10 Color Coded Restraint Points, for Patient Immobilization	EA	1
6530-01-450-7213	Restraint, Head	Universal Head Immobilizer; Ferno Model 445; 2 Side Support Blocks; Complete with 1 ea Head/Chin Strap; 1 ea Assembly Base	EA	1
6532-01-524-6932	Blanket Casualty Hypothermia w/ 4 Heat Pads	Blanket, Casualty, Hypothermia Prevention and Management with 4 Oxygen Activated Heat Pads, Vacuum Sealed, 3 in. x 9 in. x 12 in.	EA	1
9930-01-331-6244	Pouch, Human Remains	CFSS Item; Current Use, Cotton Duck, 6 oz. per sq. yd, 3 Webbing Loops Either Side, Full Length Slide Fastener, Vinyl Coated, 94 in. Lg x 30 in. W.	EA	1

(Sheet 4 of 4) CAFDTMK Cont.