AIDA Safety Protocols for Competitions / Records

Safety protocols for competitions and records events are to be observed at all AIDA regional and national competitions and/or record events sanctioned and judged by AIDA.

Although not sanctioned by AIDA, it is highly recommended that all interclub competition and/or records be governed under the same protocols.

General Protocols

1) Safety and First Aid Equipment on site shall include, but not be limited to the following:
   a) DAN oxygen unit or similar system
   b) First aid kit
   c) Spine-board
   d) Emergency communication device such a cellular-phone, VHF, etc
   e) Emergency procedure plan
   f) Emergency evacuation vehicle (boat, car, ambulance, etc)

2) General Safety PrecautiLanons
   a) Notification of the hyperbaric chamber of the event for depth events
   b) Notification of the nearest ambulance dispatch of the event
   c) All equipment is reviewed and checked for operation and suitability for event area
   d) A general briefing of safety procedures is undertaken with all support/safety staff on event day
   e) An up-to-date emergency procedure plan is present and appropriate for event area

3) In the event area, the following specific safety personnel shall be on-site:
   a) Two medical persons of which one will be the Safety Supervisor, both with the following current certifications within 2 years;
      i) One medical person shall have an Emergency Medical Technician (EMT) or equivalent status or higher
      ii) Basic CPR and first aid or higher
      iii) DAN Oxygen Provider or equivalent
   b) Diving Supervisor for depth competitions / records with the following current certifications;
      i) Recreational and/or technical Divemaster or higher based on diving requirements and knowledgeable with the safety protocols and requirements of the diving environment
      ii) Basic CPR and first aid

iii) DAN Oxygen Provider or equivalent
iv) AIDA Freediving Safety/Support Orientation

c) Safety scuba divers for depth competitions with the following current certification;
i) Preferably Rescue Diver or higher scuba certification in current status for recreational depths no deeper than 40m
ii) Technical diving qualifications appropriate for the depths required deeper than 40m or requiring decompression
iii) AIDA Freediving Safety/Support Orientation

d) Safety freedivers with the following current certifications;
i) AIDA Freediving Safety/Support Orientation with endorsement applicable to event
ii) Preferably having current CPR and first aid and DAN Oxygen Administration

4) Job Description for the safety personnel:
a) Safety Supervisor / Medical Personnel
i) In charge of the overall organization and safety of the waterside area
ii) Insure necessary safety/first aid equipment is present, working and in standby condition
iii) Have appropriate communication and emergency procedure plan
iv) Insure the activation and response of the Emergency Management System (EMS) in the event of an emergency

b) Diving Supervisor
i) Insure the safety and coordination of the scuba and freediving safety personnel
ii) Maintain safety and proper working order of diving safety equipment such as:
(1) Emergency decompression and/or safety bottles
(2) Hang or decompression lines
iii) Able to assist in any in-water scuba or freediver emergency

c) Safety Scuba Divers
i) Provide a level of safety/support and judging for the competition and the competitors
ii) Act as a buddy to in-water video/camera crew and other safety divers in the water

d) Safety Freedivers
i) Provide a level of safety/support and judging for the competition and the competitors in the shallow ascent zone between 20m to the surface

Time Competitions/Records

1) Disciplines of time competitions include the following;
a) Static Apnea

2) Areas of time competition include (See figure 1)
a) Warm-up area

b) Standby zone
c) Competition zone

3) Supervision
   a) Warm-up Area
      i) Each warm-up area will be supervised by at least one safety freediver per six competitors
      ii) In addition competitors warming up should have an assistant/coach to supervise any wet breath-holds of substantial duration
   b) Stand-by Zone
      i) Competitors are supervised by the warm-up area safety freediver
   c) Competition Zone
      i) Each athlete performing in the competition zone will be supervised by one safety freediver

4) Safety Signals for time competitions/records
   a) Safety signals will be determined by the safety from the competitor
   b) Signals must be deemed clear and distinguishable or a suitable signal must be agreed upon
   c) Judges have the overall voice concerning safety signals
   d) Safety signals are as follows:
      i) One minute before the announced performance (AP) a signal will be given every 30 seconds by the safety and an distinct “OK” signal returned
      ii) Upon reaching the announced performance signals will now be given and returned every 15 seconds
      iii) Anytime a return signal isn’t recognized, immediately a 2nd signal will be given
      iv) If the 2nd signal isn’t returned or recognized then the performance will be stopped and assistance given if appropriate

Distance Competitions/Records

1) Disciplines of dynamic competitions/records include the following;
   a) Dynamic Apnea
   b) Dynamic Apnea w/o fins (freehands)

2) Areas of time competition include (see figure 2)
   a) Warm-up area
   b) Standby zone
   c) Competition zone

3) Supervision

a) Warm-up Area
   i) Each warm-up area will be supervised by at least one safety freediver per six competitors
   ii) In addition competitors warming up should have an assistant/coach to supervise any wet breath-holds of substantial duration / distance
b) Stand-by Zone
   i) Competitors are supervised by the warm-up area safety freediver
c) Competition Zone
   i) Each athlete performing in the competition zone will be supervised by two safety freedivers
   ii) Each safety freediver will have a float for the competitor to rest upon and also act as support for safety

4) Safety for distance competitions/records
   a) Due to the speed of dynamic apnea, two safety freedivers will follow the athlete above and to the side, but not to obscure the judges view
   b) Safety freedivers should be ready to divide the competition area into a manageable section taking into account the speed of dynamic apnea
   c) Kick style, speed, body position, bubble release will be ready signs for interdiction

Depth Competitions/Records

1) Disciplines of dynamic competitions/records include the following;
   a) Constant Ballast
   b) Constant Ballast w/o fins
   c) Variable Ballast
   d) Variable Ballast Absolute
   e) Free Immersion

2) Areas of time competition include (see figure 3)
   a) Warm-up area
   b) Standby zone
   c) Competition zone

3) Supervision
   a) Warm-up Area
      i) Each warm-up area will be supervised by at least one safety freediver / scubadiver per four competitors
      ii) Each warm-up area will be supervised by at least one safety scuba diver a depth of 10-20 meters per 10 freedivers

iii) In addition competitors warming up should have an assistant/coach to supervise any wet breath-holds of substantial duration/depth

b) Stand-by Zone
   i) Competitors are supervised by a stand-by zone safety freediver

c) Competition Zone
   i) Each athlete performing in the competition zone will be supervised by two safety freedivers who will accompany them upon ascent to the surface from 15m and 10m.
   ii) A Lanyard System is mandatory.
      (1) A lanyard is a line that loosely secures the freediver to the competition line, without inhibiting their descent and ascent, to be composed as follows:
         (a) A carabineer without locking mechanism, big enough to be easily hooked and unhooked to the competition line.
         (b) A semi-elastic or non-elastic line between 30cm and 100cm in length, made of material designed not to knot, bind or wind.
         (c) A wrist band which cannot be removed inadvertently, which the athlete wears on the wrist opposite the competition gauge wrist OR a waist belt other than the weight belt which cannot be removed inadvertently and worn around the waist.
   iii) A Freediver Retrieval System (FRS) will be employed that will actively ascend the freediver at a minimum of 1m/s or faster to the surface. This may consist of either a Diver Assisted (DA) system; Line Assisted (LA) system; or a Counter Balance (CB) system. They are as follows: (see figure 4)
      (1) Diver Assisted (DA) FRS- The DA system employs a lift bag that can be attached to the freediver or the competition line below the freediver to insure the lanyard is caught upon ascent up the competition line. (See figure 5 below)
         (a) This lift bag system must be quickly deployable within 30 seconds or less and should have a dedicated air source for filling.
         (b) Provide a minimum of 15kgs of positive lift at depth and have a quick carabineer to attach it around the competition line, but not secure onto the competition line.
         (c) Competition line is merely a guideline to the surface that the lift bag ascends up.
      (2) Line Assisted (LA) FRS- The LA system utilizes lift bags that can be attached and secured directly onto the competition line where both the competition line, it's ballast and the freediver can be lifted to the surface. (See Figure 6)
         (a) The lift bag for the LA system should have the bottom ballast weight + 10% plus 15kg of lifting capacity for the freediver.
         (b) A reliable and quick attachment system to the competition line must be employed such as commercially available climbing mechanisms that won't let loose from the competition line.
         (c) Safety scuba divers should be stationed at a minimum of ½ the max depth plus 5m. Two LA systems should be ready to work to make two lifts of the line to the surface.

(3) Counter Balance (CB) FRS- The CB systems utilizes a weight attached to the surface end of the competition line which can be dropped to counteract the competition line bottom ballast. (See figure 7)

(a) CB should be weighted such that it contains the bottom ballast weight + 20% plus 15kg of additional weight for the freediver.

(b) Additional safety scuba divers should be employed as secondary safety with a redundant LA system at a minimum of ½ the max depth plus 5m.

iv) Each athlete in the competition zone will be supervised by the following safety scuba divers:

(1) Spacing between safety scuba divers will be such that a competitor will be within visual contact of at least one safety scuba or freediver throughout the dive. When continuous visual contact cannot be maintained, then safety scuba/freedivers will utilize timing and a sound signal system to insure continuous monitoring of the freediver can be maintained.

(2) When a DAFRS is used, no less than a buddy team will be placed at the deepest depth. There will be vertical spacing between subsequent safety scuba divers of 20m for single divers or 40m spacing between buddy teams (to a minimum shallow depth of 30m).

(a) Bottom safety scuba divers may remain 20m from the max bottom as long as they are using a LAFRS.

(b) Or bottom safety scuba divers must have the ability to descend and affect a rescue from the max depth the freediver may reach if using a DAFRS only.

(3) When a LAFRS or CBFRS is utilized, a buddy team employing a LAFRS will be stationed at ½ +5m the max achieved depth for each competitor. A timing system must be maintained so that a LAFRS can be initiated.

(4) Timing System – Utilized to insure when a LAFRS or CBFRS should be initiated.

(a) Total descent and ascent distance from safety scuba diver to max depth at 0.75m/s is the deployment time. Ex: Max depth is 75m, safety scuba divers at 45m, total distance is 60m (2 X 30m) by 0.75m/s = 80 seconds deployment time from freediver descending past safety scuba divers.

(5) Safety Sound Signals – to be used by safety divers as follows:

(a) Three Taps – Freediver is “OK” and passing our depth upon ascent. Releases safety scuba divers below that depth from LAFRS deployment.

(b) Five Taps (repeated) – Diver recall, “competition performances are cancelled, ascend and finish safety or deco stops”.

(c) 10 Continuous Taps (fast) – EMERGENCY EVACUATION!

(i) Last bottom safety scuba divers initiates LAFRS.

(6) Safety Light / Visual Signals – to be used by safety divers as follows:

(a) “OK” (circular light signal) – Freediver is “OK” and passing our depth upon ascent.

(b) "Diver Recall" (figure eight light signal) – Diver recall, "performance(s) are cancelled, ascend and finish safety or deco stops".

(c) "EMERGENCY" (back and forth light signal) – EMERGENCY EVACUATION, "athlete evacuation from bottom, watch for ascending diver/athlete" or also to "employ secondary evacuation device (counter balance)". Must be agreed upon prior to descent.

4) Safety for depth competitions/records
   a) Safety divers must act as depth markers, judges and safety for competitors
   b) If an athlete should require the assistance of a safety scuba diver, the athlete is now a scuba diver and under the control of the safety scuba diver
   c) At no time, should an athlete breath off compressed gas, will they be allowed to ascend independently and without continuous breathing off the scuba unit
   d) Appropriate safety stops will be followed and the athlete may be passed to shallower safety scuba divers if appropriate
      (i) A float will be provided for the competitor to rest upon and also will act as support for safety