

## **2015 JOINT SERVICE DIVING SAFETY CONFERENCE – SUMMARY BY TIM GORT**

Below is a bullet point summary of the conference.

On arrival all attendees were given a pack containing a slate version of the BSAC Casualty Assessment/Incident Procedure, and a diving logbook.

### **JSSADC Update – Dominic Robinson, OIC JSSADC**

- Planned move within South Yard. Numerous plans but proposed location and date TBC.
- Manning. 3x civil servant posts to be created. Ginge Crook will be new CI. Graham Crouch will take 2<sup>nd</sup> post. Third as yet unfilled.
- Incrementals. No pre-requisites required. Three months minimum duration.
- SADS courses. CTP modified to suit new location, only one dive per day due to extra transit time and admin required. Currently filling all courses, and employment of extra staff as required if courses are over subscribed.
- OWI courses. 3 courses this year all filled to maximum.
- AI. 1x course annually.
- AD (big boys diving) week programmed.
- AD course. Now 2 weeks long as includes a week in Porthkerris to sign off dive managements and condition dives.
- ADP and twinset courses.
- CCR back in for 2015.
- Increased foundation courses over last year. 2x OD, 4x SD & DL. Requesting additional instructor and safety diver support. Contact Phil Mikolajewski if interested.
- Exped facilities available.

### **BSAC Safety Update – Jim Watson BSAC**

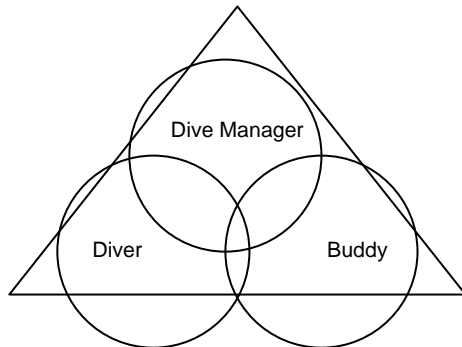
*Extracts from DOC last year*

- Incidents historically rose, and then leveled off for a number of years. Recently (past 3-4 years) there has been a downward trend. Initially assumed it was due to poor weather and a lack of diving, but as it continues it appears to be due to better safety procedures and training.
- Coastguard, helicopter and RNLI stats also follow similar trend to BSAC.
- 16 UK fatalities last year (10 year trend 15.4) 6 of which were BSAC members (10 year trend 6.2) and 10 were non BSAC members (10 year trend 9.2). 7 overseas involving BSAC members.
- Not enough information reported to find out why.
- Of the fatalities, 6 involved trio diving, but only 2 of the 6 involved separation.
- Snorkeling had one fatality (solo snorkeler).
- One fatality involved diving below 50m, trimix, and missed decompression stops.
- One fatality involved a cave diver (dry passage, breathing bad air).
- Of all the fatalities, all were over 40 less 3. Ages ranged from 50-70.
- Average age of a diving incident is 43 (compared to 36 in 1998. Average age of a diving fatality is 53 (compared to 39 in 1998). Average age of a fatality due to a medical condition is 60.
- Root cause appears to be drowning, caused by barotrauma, heart attack/stroke. Comes from immersion which increases circulatory volume, increased heart and lung volume, increased heart pressure and low lung pressure. Studies have also shown triathletes are effected. Immersion is the issue, not necessarily diving.

- DCI incidents. There is an increase in incidents due to repetitive diving, and less due to rapid ascents (as a percentage, overall the numbers are down).
- 38 boat and surface incidents, but as per diving incidents there is a downhill trend.

**Dive Management – Steve Cox, Ex OIC JSSADC, currently leading the BSAC DTP review regarding DM**

- SADS scheme is seen as the Gold standard in DM in Sports Diving. Is this actually true? If so, why?
- Currently DM training throughout the entire DTP; OD-AD.
- 3 levels of DM; personal, buddy, and team.



- What do the military do that is different from BSAC? Central location for training. A single training team. Both have strengths and weaknesses.
- SADS qualification is not hierarchy based, but qualification based.
- SADS course should appear on SJAR/OJAR as it has leadership and management qualities.
- Currently 150 registered SADS. 15 are permanent staff at centers/DST. 41 are BSADS.
- Currently SADS make up 6% of registered association divers.
- SADS scheme contains components of DM; planning, briefing, site setup, PRM, post-dive activities.
- New AI course teaches DM instruction.
- Possible outcome:
 

Entry Level	-	Personal DM
Development Level	-	Buddy DM
Leadership Level	-	Team DM
Advanced Level	-	Team DM

*The Following is Steve's own opinion and his thoughts.*

- How could we increase the amount of SADS?
- Could we teach BSADS through distributed training? Delivered by a ESADS AI, with a lesson on the BRs and management?
- Could ESADS development be delivered through distributed training? Delivered by a ESADS AI. Would require a SADS assessor to oversee to ensure quality assurance (QA)
- ESADS assessment to remain with JSSADC.
- Could BSAC look at a non-diver DM course for wives, spouses etc...

*Moving on...*

- New DTP to be released 2016/2017.

**BRd 2806(5) Update – Cdr Mark Atkinson, SoD**

- Will remain in post for 3 years minimum.
- SoD post created in 2003.

- JSSADRs took 7 months to re-write. Regulations should be easier to understand, and avoid duplication.
- BRd 2806(5) is a living document with an annual update every autumn.
- Document draws guidance from [The Diving at Work Regulations 1997](#) and [BSAC Safe Diving Practices](#).

*Below is a broad-brush overview on some of the changes:*

- Chapter 1 Joint Services Sub-Aqua Diving Governance and Structures:
  - Introduction of AP16 cells for CCR.
  - Civilians participating in AT/members of branches. No change to last year, but making the regulations clearer as JSP 419 and 917 had conflicting information (419 was the senior document). In summary, **all** civilians participating in AT or branch diving **must** be **essential** and must have an **HSE medical**.
  - JSP 419 is currently being re-written.
  - MOD Approved Centres (MAC). No requirement for SADS or **gas** testing (less Factair F2235 on arrival). Currently 15 centers. DST assured annually.
- Chapter 2 Joint Service Sub Aqua Diving Practices:
  - Medical fitness and medication. Must be declared to SADS and MO.
  - Duties of SADS. All **life support** equipment and **dive computers** must be CE marked.
  - Maximum depth and divers in the water amended.
  - Breath hold diving and snorkeling **must** be on JSATFA.
  - Must carry enough emergency medical equipment (O2) to get casualties from point of incident to **emergency** services.
  - Deep dive planning/deco regimes. Can use any **recognised** software.
  - Build up dives must be in 10m progressions.
  - Availability of chambers. Must be 2 man/2 compartment. Max 6hrs away.
  - New gas regs (see later).
  - CCR diving back in.
  - Must ensure 2hr post dive break prior to exercise.
  - In the event of a sub-aqua incident, the SADS is still responsible for the casualty once a HOTO has been done with the emergency services. SADS has a duty of care to ensure a suitably qualified and empowered individual remains with the casualty until the completion of treatment.
- Possible safety developments for 2015:
  - 30m+ diving; currently 3 days of diving before a break. Extended to 4 days. **Agreed**.
  - 3 dives in a 24hr period changing to 3 dives in a calendar day. **Under consideration**.
  - Reducing the maximum air diving depth to 40m, from 50m. Not just AT but all military diving & Police. **Under consideration**.

*Authors note: Is this a set max depth or based on a gas partial pressure? For example, 27% Nitrox at 42m gives an EAD of **39m**.*

  - Diving medicals changing to annual **full** medical.
- Note on looking at previous PXR's before planning your exped.

### **HMS Pathfinder Expedition - Mike Rowley BSAC**

- History of the wreck and its sinking.
- Diving platform.
- Equipment/plan.
- Safety.
- Emergency procedures.

## **MOD Diving Safety – DST (DSO(AT) and DSI(AT))**

- Gas testing:
  - JSP 319 released Apr 15. All gas requires an **annual** laboratory test (UKAS/ISO17025/BSEN12021:2014).
  - Overseas lab test. New contract in place. Cost of test is £300 plus postage. New cylinder meets international regulations for (air) transportation.
  - F2235 require annual calibration. Can be done on F2247-P (held by DST, JSSADC, RAFSAA branches, RNRMSAA and ASADA).
  - Current branch gas testing with BOC due to expire Jul 15.
- Diver recall:
  - Acoustic FFM and thunder flashes still in trials. Nothing is mandated, as long as your chosen system works. Marine approved thunder flashes expect to cost £10-12 once trials completed.
- BSAC/Military divers:
  - New SALT table produced.
  - All new military divers will automatically get their BSAC OD qualification. DST will deliver OT1 & OT4 lectures.
  - JSSADC will hold new military diver cross over packs. Branches can apply to JSSADC for them. HMS Temeraire will fund.
- Branches:
  - Mark runs the branch audit.
  - Audit every 3 years. Certification issued. All diving is to stop if certification expires.
- DST emails will change. Currently start DSEA, now will start DSA as at 1 Apr.

## **JSSADPAC Q&A**

Next JS Diving Safety Conference 16 Mar 16.