



Information sourced from IMCA Safety Flash

Failure of first stage regulator low pressure (LP) blanking cap

What happened

During a dive, a leak was noted coming from the first stage of diver #2's regulator on the bail out bottle. Further inspection identified that the low-pressure port blanking cap was found to have failed. The dive was terminated, the divers recovered safely, and the regulator was removed from service.

During the investigation of the regulator there were no signs of damage to the body or any of the associated hoses, fittings or the gauge. The regulator was within its recommended annual service period.

The regulator manufacturer was contacted regarding the shelf life of the blanking screws and recommended O-ring replacements.



Regulator with 1st stage with low pressure port identified



The two pieces of the failed blanking plug

Actions

The following actions and recommendations are deemed necessary to manage the risk associated with 1st stage regulator blanking caps.

- Immediate actions:
 - Manufacturers recommendations
 - O-rings to be replaced at each service or every two years
 - Confirm torque settings of 2N to be applied to all blanking caps
 - Diving Contractors actions
 - Replace all blanking caps and O-rings on existing in-service 1st stage regulators;
 - Update work orders to confirm torque settings of 2N to be applied to all blanking caps;
- Further actions:
 - Release as IMCA safety flash;
 - Identify and assess condition of all 1st stage regulators that have been in service in excess of 10 years for possible replacement.