Divers living in saturation conditions require constant monitoring and control by trained personnel outside the deck compression chamber.

The oxygen content of their breathing gas, the concentration of carbon dioxide in the atmosphere, the pressure, temperature and humidity of their environment all need to be monitored regularly and functions such as feeding and sewage disposal need to be controlled from the outside by life support personnel.

The history of commercial diving has seen a very rapid expansion in the use of saturation diving techniques, with increasingly sophisticated equipment and larger chamber complexes being developed to meet the need for large numbers of divers to work at greater depths. This has greatly increased the responsibilities of those who control the chamber environment and, consequently, the knowledge that they must have of the physics, physiology and medical aspects of supporting people in high pressure environments.

### Education and Qualifications

Life support personnel come from a variety of different backgrounds, including highly skilled technicians from other industries, qualified nurses, former divers and some specially trained for the role. Divers qualified to an appropriate bell diving standard are usually trained in life support techniques as part of their diver training and may be appointed as Assistant LSTs without further training.

### Skills and Training

The starting point and most junior grade is Assistant Life Support Technician (ALST), which refers to a person gaining experience. Before being sent offshore as an ALST, entrants other than divers with existing appropriate qualifications must have satisfactorily completed an IMCA-approved Assistant Life Support Technician training course to satisfy IMCA guidelines.

ALST courses are held over a minimum period of sixty hours (usually ten days). Those who are unsure as to either their suitability for life support work and/or their ability to adapt to an offshore working environment might be well-advised to gain an insight by initially seeking alternative offshore employment (for example as a tender or a rigger) before committing themselves.

In addition, to work offshore in any capacity it is usually necessary to complete a basic offshore safety induction and emergency training (BOSIET) course. This generally includes first aid, safety at sea, the basics of fire and firefighting and helicopter underwater escape training (HUET). In many regions, someone who has not successfully completed a course of this nature will not be permitted to work offshore.
**Medical Fitness**

In many areas of the world, potential offshore workers must undergo and pass a special medical examination. These requirements may vary from country to country, but usually involve a medical leading to a certificate which may be valid for one or more years. The requirements are not unduly onerous for fit and active people but certain common conditions, or previous injuries, can be a cause for failure. If in any doubt, interested persons should seek out a doctor knowledgeable about offshore standards, before they seek work or embark on a course of training.

**Working Conditions and Prospects**

Once they have gained the relevant hands-on experience and are deemed competent by their employer, qualified ALSTs may be considered for promotion to Life Support Technician (also known as chamber or panel operator). This requires sitting an examination (set by IMCA). The exam contains questions on diving-related physics, physiology, safe working practices and optional legislation questions relevant to regional requirements. A Life Support Technician may eventually be promoted by his employer to Life Support Supervisor. Full details of the minimum requirements for progression are set down in the publication *IMCA Offshore Diving Supervisor and Life Support Technician Schemes* (IMCA D 013 as revised), available from IMCA.

It should be understood that contractors tend to give preference to the more experienced personnel and the newly qualified Assistant Life Support Technician may not find it easy to gain employment immediately following completion of the training course.

**Further information**

IMCA audits and formally approves certain LST training courses. A list of currently approved courses can be found at [www.imca-int.com/diving-division/training-and-certification](http://www.imca-int.com/diving-division/training-and-certification)

IMCA members include a number of diving contractors all over the world. For an up-to-date list, including links to their websites for contact purposes, see [www.imca-int.com/members](http://www.imca-int.com/members)

Also available from IMCA:

**I want to be ...**
- Deck/engineering officer
- Diver
- DP operator
- Geophysicist
- Life support technician
- Offshore engineer
- Project manager
- ROV pilot/technician
- Surveyor
- Survey data processor
- Survey engineer/technician
- Technician

**plus:**
- My story case studies
- Make the move guides
- In depth feature articles

and much more online at: [www.imca-int.com/careers](http://www.imca-int.com/careers)