Pop-up floats (previously referred to as the ExFloat or EXIT float) are one of two types of new profiling floats designed to study the water-ice boundary and to study how the system is modified during and after ice retreat. Pop-Up floats are designed to be deployed in the fall (ice-free) months and sequentially released during the winter and spring (ice-covered) months. The floats collect data while moored along the bottom, during ascent through the water column, and while positioned directly underneath the ice. Once free from the ice, all data from the floats is telemetered to shore.

In order to reduce production costs for these expendable floats, they have been custom designed in-house by PMEL. A number of novel cost-saving design features have been integrated to achieve a cost per float of ~$2,000 - such as low-cost pressure housings, COST electronics, and a load reducing mechanism to utilize burn wire releases. Despite cost-reductions, the floats still provide high-quality data, measuring Temperature (±0.01°C accuracy), Depth (±0.21m accuracy), and Photosynthetic Active Radiation (±3% accuracy), as well as Tilt Angle and GPS location.They transmit data to shore using an on-board Iridium modem.

All electrical, mechanical, and software designs for the floats have been completed and a total of 7 units have been constructed. One was deployed in the Chukchi Sea in September 2016. The other 6 floats are undergoing thorough testing and calibration and 2 separate deployments are planned 2017 – a short duration summer deployment in July, and a long duration over-winter deployment in September.