



United States Coast Guard Historian's Office

Preserving Our History For Future Generations

Laser Lighthouse

As early as 1972 the Coast Guard experimented with the use of lasers in short-range aids to navigation (ATON). Though the experiments were cancelled due to technical problems, the tests proved that lasers could be used as an effective aid. In the early 1990s the Coast Guard again experimented with lasers. In March 1992 a single-line laser range began operation on the roof of the USCG Research and Development Center in Groton, CT with minimal regular maintenance. Theoretically, the use of lasers could have precluded the need for buoys as properly positioned lasers could mark a ship channel and the laser light, unlike the lights on buoys, would be visible in almost any weather conditions. In all three concepts were developed and their prototypes tested. In the end the Coast Guard did not adopt these new technologies. Though the system proved capable and could be operated less expensively than conventional aids, the cost of overhauling the short-range aids-to-navigation system of the Coast Guard would have required a tremendous expense that has been precluded by other technologies, primarily the satellite-based Global Positioning System (GPS) which has become standard throughout the world.
