Casey received her B.S. in Electrical Engineering from the Coast Guard Academy in 1989 and her M.S. in Operations Research at Georgia Institute of Technology in 2002. Casey also received a Masters of Strategic Studies at the Marine Corp War College in 2011. She became an MIT Seminar XXI Fellow in 2010.

Casey is approaching 24 years of active duty service as an officer in the U.S. Coast Guard. Since 2011 she has been Commander, USCG Sector Guam. She is responsible for all Coast Guard missions in a 2 million square mile region in the Western Pacific. She leads and manages 200 personnel, 2 patrol boats and a small boat station with four response boats. In addition, Casey is the Commanding Officer of the South East Regional Fisheries Training Center.