RDML Sara "Clutch" Joyner received her commission in 1989 graduating with merit from the Naval Academy with a B.S. in oceanography. After graduation, Joyner attended flight school and earned her naval aviator wings in July 1991 from VT-24 in Beeville. Her first assignment was at VC-5 at Cubi Point Philippines flying A-4E as an adversary pilot in 1992. With the closure of the base, she transferred to VC-8 in Roosevelt Roads Puerto Rico where she continued to execute adversary and ships services through 1994. She transferred to COMSTRIKFIGHTWINGPAC in 1994 and served as the Assistant Operations officer until, due to the repeal of the combat exclusion law, she was able to transition to the FA-18 Hornet. Upon completion of her training as a Hornet Pilot, she reported to VFA-147, the "Argonauts," in May of 1997. Remaining with VFA-147 for both her Junior Officer and Department Head tours, she completed two Western Pacific Cruises to the Arabian Gulf aboard USS NIMITZ (CVN 68) in 1997 and 1999 aboard USS JOHN C. STENNIS (CVN 74) in support of Operation SOUTHERN WATCH. In November of 2001, she again deployed with VFA-147 aboard USS JOHN C. STENNIS in support of Operation ENDURING FREEDOM. In January 2002, she reported to United States Joint Forces Command, Norfolk, Virginia where she served in the Current Operations Branch as Force Deployment Officer for the NORTHCOM, EUCOM, and CENTCOM Areas of Responsibility in support of Operations ENDURING FREEDOM and IRAQI FREEDOM. She reported to VFA-105 in November of 2006 as Executive Officer. In 2007, Joyner assumed leadership of Super Hornet Strike Fighter Squadron "Gunslingers "(VFA) 105 and deployed in support of the surge in Iraq. In 2013, she took command of Carrier Air Wing (CVW) 3 and deployed aboard the USS TRUMAN to the Arabian Gulf. Joyner has flown the A-4E Skyhawk, as well as the F/A-18 Hornet, Super Hornet and Growler.

RDML Sara Joyner established her place in naval history as the first woman to command a strike fighter squadron (VFA-105) in 2010, and as the first female commander of a carrier air wing (CVW-3) in 2013. As of 2017, RDML (select) Joyner has held numerous other leadership positions in the Navy including assignment as the Joint Strike Fighter Requirements Officer, with the CNO's Strategic Studies Group and as Director, Navy Senate Liaison, Office of Legislative Affairs.