

JAMES R. COOLEY, PH.D.

EDUCATION

Ph.D.	University of North Dakota, Aerospace Sciences Dissertation: "United States Coast Guard Aviation Safety Climate Assessment Instrument"	May 2023
MS	University of North Dakota, Aviation Thesis: "United States Coast Guard Aviation Safety: Relationship Between the Safety Survey and the Extent of Hazard Reporting"	May 2019
BS	US Coast Guard Academy, Management	May 2003

CERTIFICATIONS, QUALIFICATIONS, DESIGNATIONS

Certified Flight Instructor – Helicopter Instruments Renewed in 2018, 2022, 2024	August 2016
Federal Aviation Safety Officer Interagency Committee for Aviation Policy	February 2016
Airline Transport Pilot	June 2015
MH-60T Transition Course – qualified in airframe	May 2011
Collateral Duty Civil Rights Officer	May 2007
Incident Command System (ICS) Qualified	April 2007
Coast Guard Aviator Designation; # 3828	October 2006
Commercial Instrument License – airplane & rotorcraft-helicopter	June 2006
HH-60J Transition Course – qualified in airframe	October 2006
Search & Rescue Fundamentals Qualified	October 2006
Landing Signal Officer Provided maneuvering signals to helicopters landing aboard ship; 50+ landings	July 2004
Rescue Swimmer	July 2004

Man overboard emergency response

PROFESSIONAL TRAINING

Command Cadre Ice Rescue Course U.S. Coast Guard	January 2023
Operations Officer Course U.S. Coast Guard	April 2022
Aviation Mishap Analysis Course Southern California Safety Institute	September 2019
Certification in Aircraft Accident Investigation	September 2015
Investigation Management Southern California Safety Institute	September 2015
Aviation Engineering Safety Southern California Safety Institute	June 2015
Safety Management Systems Southern California Safety Institute	February 2015
Human Factors in Accident Investigation Southern California Safety Institute	November 2014
Gas Turbine Accident Investigation Southern California Safety Institute	August 2014
High-Altitude Power Management Mountain Qualification Course	June 2014
Aviation Safety Officer School	May 2014
Aircraft Accident Investigation Southern California Safety Institute	May 2014
Civil Rights Training As singular Civil Rights Officer at largest operational USCG air station	November 2006
FAA Commercial Pilot Rotary and single-engine fixed wing	June 2006
US Navy Flight Training Basic and Advanced	June 2006

Enneagram
Personality assessment

November 2002

Myers-Briggs Type Indicator
Personality assessment

June 2002

HONORS AND AWARDS

Meritorious Service Medal 2022
Meritorious Achievement as Aviation Safety Manager, USCG Headquarters

CG Commendation Medal (Operational) 2017
Outstanding achievement saving & assisting 137 lives; 74 rescues; 84 instructional flights; co-wrote qualification standards for fleet Flight Safety Officers

Captain Marion Gus Shrode Award Aviation Safety 2016
Singular winner for running best unit aviation safety program amongst all the US Coast Guard in preceding year.
<https://aoptero.org/awards/roost-2016-awards/>

PACAREA CG Foundation Admiral Chester R. Bender 2015
Heroic action involving personal danger for high altitude helicopter rescue
Acceptance speech: <https://www.youtube.com/watch?v=LFdROFHx7S0>

Vertical Flight Technical - CAPT William J. Kossler Award, International Vertical Flight Society 2015
Greatest achievement in operation of vertical flight.
<http://vtol.org/customincludes/showawards.cfm?awardid=8>

Commandant's Letter of Commendation (Operational) 2015
Outstanding performance on two back-to-back rescues: 1. Overturned vessel and saving 5 lives; 2. Nighttime cliff rescue high hoist saving 2 lives.

CG Achievement Medal (Operational) 2014
Superior performance – High altitude rescue of injured ice climber
Featured on The Weather Channel's "Coast Guard Cape Disappointment Pacific Northwest"

CG Achievement Medal (Operational) 2013
Superior performance – 25 lives saved, 16 rescues, & catastrophic emergency
Extensive coverage on The Weather Channel's "Coast Guard Alaska" for numerous rescues

CG Achievement Medal (Operational)	2012
Superior performance – saved 12 persons from adrift oil rig headed toward rocks; delivered 1,500 pounds of critical engine parts to adrift tow vessel during 20’ seas. Rescue featured on The Weather Channel’s “Coast Guard Alaska,” Gentlemen’s Quarterly magazine, National Public Radio, and The New York Times Magazine	
CG Unit Commendation Ribbon	2012
Exceptionally meritorious service in response to the 2010 7.0 earthquake in Port-au-Prince, Haiti	
CG Arctic Service Medal	2012
21 days of non-consecutive duty deployed with H-60 helicopter north of the Arctic Circle	
CG Achievement Medal (Operational)	2011
Superior performance – 31 lives saved and assisted 57 others; 95 search and rescue cases; four hurricane responses; 25 LE cases resulting seizure of 5,580 kg of cocaine.	
CG Achievement Medal (Operational)	2010
Superior performance – next-day response to Port-au-Prince, Haiti after January 2010 7.0 catastrophic earthquake. 37 people rescued. Transported 4 physicians and \$10k in antibiotics. In 14 days, flew H-60 helicopter 4,900 nautical miles over the course of 49 flight hours.	
Humanitarian Service Medal	2010
UNIFIED RESPONSE – Haiti Earthquake Relief Effort	
CG Achievement Medal (Operational)	2009
Superior performance – saving heart attack victim from fishing vessel in 20’ seas; 245 NM transit, middle of the night long range medevac	
CG Commendation Medal (Operational)	2008
Outstanding achievement flying rescues/logistics and humanitarian aid in the wake of 2 consecutive hurricanes	
Commandant’s Letter of Commendation (Operational)	2008
Outstanding performance as pilot responding to pre-dawn MAYDAY; vessel taking on water, 8’ seas, pitch black, night vision goggle (NVG) failure, night hoisted rescue swimmer and two survivors from life raft; 2 lives saved.	
Humanitarian Service Medal	2008
Hurricane Hanna Disaster Relief	

CG Presidential Unit Citation Meritorious achievement and outstanding performance in action from 29 August to 13 September 2005 in preparation for, and response and recovery to the devastation wrought by Hurricane Katrina.	2005
Commandant's Letter of Commendation (Operational) Outstanding performance as ship-driver onboard icebreaker; arranged \$900,000 worth of mission essential training and managed 250 scientist's administration over the course of 12 months underway.	2004
CG Arctic Service Medal 21 days of non-consecutive duty deployed onboard icebreaker HEALY north of the Arctic Circle	2003
Global War Terror Service Medal	2003
CG Special Operations Service Ribbon	2003
CG Sea Service Ribbon	2003
National Defense Service Medals Global War on Terrorism	2001

TEACHING EXPERIENCE

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| University of North Dakota, Grand Forks, ND
Assistant Professor (tenure-track), Aviation | August 2023 to Present |
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- Issues in Aerospace – Aviation 501
 - Statistics – Aviation 503
 - Qualitative Research Methods – Aviation 505
 - Capstone, Aviation Master of Science – Aviation 595
 - Human Error – Aviation 518
 - Human Error – Aviation 350
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| Chief Pilot, CG Air Station Traverse City, MI | June 2022 to May 2023 |
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- Operations Department Head responsible for all aircrew training, upgrades, evaluations, and safety.
 - Oversaw daily flight schedules for training (and operational missions).
 - Monitored pilot performance and coached individual crew members to improve abilities.
 - Chief Pilot & Ops planner for multi-mission unit. Leads 16 pilots, 55 aircrew, & 43 Auxiliary; responsible for training given:
 - Air support for CG, DOD, US Secret Service, state & local LE

- 10,000 NM coastline
- Extreme winter weather

University of North Dakota, Grand Forks, ND
Adjunct Instructor, Aviation

March 2022 to May 2022

- Human Error – Aviation 350
 - Undergraduate course averaging 30 students per semester, covering the following topics: human error impact, human theory, errors within complex systems, data use, checklists, and automation.
 - Developed course material, projects, quizzes, exams, and homework.

Aviation Safety Manager, Washington, DC

May 2019 to June 2022

- Aviation Mishap Analysis – primary instructor and curriculum developer for recurring sessions
 - Jointly taught alongside NTSB
 - 40-hour accident investigation course
 - 200+ Servicemen qualified to serve on prospective accident investigations
- Flight Safety Officer qualification course – developed entire curriculum
 - 80-hour training qualifying 120+ vetted/selected prospective Flight Safety Officers
 - Selected, trained, and mentored 75 officers annually
 - Human Factors, privileged safety data, aeromedical, aerodynamics, mishap analysis, reporting, safety culture

Flight Examiner & Instructor Pilot, Astoria, OR

May 2014 to August 2017

- Evaluated all pilots on annual check rides
 - Standardization
 - Search & Rescue
 - Night Procedures and Night Vision Goggle
 - Instrument
- Adjudicated performance and recommended for upgrading to next qualification
 - Maintenance flights
 - Hoisting
 - Vertical Surface rescue
 - Inland SAR & confined area landings

Flight Safety Officer, Astoria, OR
Instructor in the following topics:

May 2014 to July 2016

- Crew Resource Management
- Human Factors
- Mishap analysis
 - Flight data
 - HFACS taxonomy

- Operational hazards
- Safety culture assessment

Aircraft Commander, Clearwater, FL & Kodiak, AK April 2008 to July 2011

- Primary trainer to upgrading co-pilots & first pilots.
- Aerodynamics, engines, structures, helicopter transmissions
- Complex military avionics and dynamic operational procedures.

USCG Cutter HEALY, Underway in Arctic July 2003 to November 2004
Teacher & trainer

- Music Theory:
 - Self-initiated multi-session class to active duty crew (~100) & scientists (~45) covering fundamentals, physics of sound, melody, harmony, classical rules, and jazz music theory.
 - Developed course material, arranged classroom, advertised class.
- Personality Type
 - Taught MBTI personality types, administered instrument, discussed temperament, compatibility, inclinations, and fundamentals.

RESEARCH EXPERIENCE

National General Aviation Flight Information database (NGAFID) 2025
Support data integration, analysis, and safety metric development; integration with ASIAS

Alliance for System Safety of UAS Through Research Excellence 2025
Disaster Preparedness & Emergency Response

Alliance for System Safety of UAS Through Research Excellence 2024 - 2025
Safety Risk Management Analysis on sUAS DAA Systems

Haptic Feedback Impact on Pilot Situational Awareness 2024 - 2025

Dissertation 2020 to 2023

Cooley, J. R. (2023). *United States Coast Guard Aviation Safety Climate Assessment Instrument* (Doctoral dissertation, The University of North Dakota).

Advisor: Mark Dusenbury, Ph. D.

- Safety climate assessment
- Instrument development: questionnaire, survey, intervention strategies, leadership technique

US Coast Guard Headquarters, Washington, DC 2020 to 2022
"Ready Workforce 2030" book chapter

- Researched and published chapter in Service-wide publication

- Developed, & wrote strategic vision for CG support of its people
 - Medical care,
 - geo diversity,
 - Medical Doctor recruiting,
 - HR policies,
 - Evaluation/selection/promotion
- Commandant presented at State of the Coast Guard, 2022

Thesis, University of North Dakota, Grand Forks, ND 2017 to 2019
 “United States Coast Guard Aviation Safety: Relationship Between the Safety Survey and the Extent of Hazard Reporting”

- Safety survey
- Hazard reporting definitions
- Safety culture validation

PUBLICATIONS

Books

United States Coast Guard. (2016). *Flight Safety Officer (FSO) Performance Qualification Standard (PQS)* (One of three authors).

Journal Publications

Cooley, J.R. “Tweaking the Invisible: Methods of Improving Aviation Safety Cultures,” *Air Beat*, July/August, 2016, pp. 14-17.

U. S. Coast Guard. “Ready Workforce 2030,” 2022, pp. 26-29 (Cooley led team authoring Line of Effort 3 chapter).

Journal Papers Accepted

Cooley, J.R. “New survey, so what?,” *Glideslope*, N.D.

PRESENTATIONS AND INVITED LECTURES

Guest Speaker, Spirit Airlines Operations Training; readiness, personal responsibility, leadership, & culture; May 29, 2025

Guest Speaker at the 2025 World Aviation Training Summit (WATS), “From Rescues to Readiness: Strengthening Human Factors in High-Stakes Performance,” April 9, 2025

Guest Speaker, "USCG Updates," Great Lakes Maritime Academy Board of Visitors Meeting, October 19, 2022.

Guest Trainer, Mountain Rescue, Corvallis, OR, 2017.

Moderator, "Crew Resource Management Breakout," Flight Safety Officer Standardization Course, Orlando, FL, 2017.

Guest Speaker, "Engineering Opportunities in the U.S. Coast Guard & Aviation," Clatsop Community College, Astoria, OR, 2016.

Keynote Address, Flight Safety Officer Standardization Course, Washington, DC, 2016.

Guest Speaker, Pacific Northwest Fishermen Safety Training – Coast Guard rescue capabilities, Astoria, OR, 2015.

Guest Speaker, Bahamian primary school, Ambassador-arranged, 2009.

PUBLIC APPEARANCES

Guest, "Brothers in Armchairs" podcast, interview discussing most harrowing rescues, 2021.

Helicopter Association International HAI@Work: "Managing Risk in Hazardous Environments," 2022.

Host, "Aviation Safety Podcast," released one-of-a-kind, Coast Guard-wide, 2014 - 2017.

The New York Times Magazine Feature, "The Wreck of the Kulluk," interview, January 2015. <https://www.nytimes.com/2015/01/04/magazine/the-wreck-of-the-kulluk.html>

The Weather's Channel's "Coast Guard Cape Disappointment – Pacific Northwest" feature, television show covering helicopter rescues, 2013 - 2014.

The Weather's Channel's "Coast Guard Alaska" feature, television show covering helicopter rescues, 2011 – 2013.

COMPUTER SKILLS

Programming in R: statistics, data visualization, storytelling, data cleaning

Music engineering in Logic Pro: recording, tracking, comping, editing, arranging, automating, mixing, mastering

OTHER

Musician	1997 - Present
Worldwide release - 4 albums & 9 singles. Volunteer performances with five community bands and leader of seven musical ensembles acting as primary manager, writer, announcer, and spokesperson. Earned 6 awards for live performances.	
Ranked 13 th in USA Men's short track speed skating Represented USA in international competitions.	1999
Eagle Scout Order of the Arrow (peer-nominated)	1998