

U.S. NAVAL AVIATION PILOT TRAINING PIPELINE

World War II - "Wings of Gold"

1. PRE-FLIGHT / GROUND SCHOOL (3-4 MONTHS)



Location: NAS Pensacola ("Annapolis of the Air"), University of North Carolina Chapel Hill, Iowa, St. Mary's College

- ▶ **Physical & Military Conditioning:** More strenuous than USAAF
- ▶ Heavy emphasis: Swimming, drown-proofing, survival at sea, boxing, calisthenics
- ▶ **Academic Ground School:** Aerodynamics, navigation (celestial & dead reckoning), engines, gunnery, Morse code, naval regulations
- ▶ **Elimination:** Failures "bilged" (washed out) or sent to other aircrew roles
- ▶ **Philosophy:** Physical toughness essential for survival at sea



2. PRIMARY FLIGHT TRAINING (3 MONTHS)



Aircraft: N2S "Yellow Peril" (Navy Stearman), N3N "Canary" biplane

Flight Hours: 65-75 hours

- ▶ Master basic flight in forgiving aircraft
- ▶ Develop "seat of the pants" feel
- ▶ Takeoffs, landings, basic maneuvers, spins, field traffic patterns
- ▶ **Solo flight:** Critical milestone
- ▶ Emphasis on precision and instinct
- ▶ **Instructors:** Naval Aviation Pilots (NAP) and junior officers
- ▶ **Note:** Navy used military instruction, NOT civilian contract schools



3. INTERMEDIATE FLIGHT TRAINING (3 MONTHS)



Aircraft: SNJ Texan (Navy's AT-6) – powerful monoplane

Flight Hours: 75–85 hours

- Transition to heavier, complex aircraft (retractable gear, variable-pitch prop, radio)
- **Formation Flying:** Tight, disciplined formations for fleet operations
- **Instrument Flying:** "Under the hood" for over-water navigation
- **Aerial Gunnery:** First introduction with camera guns
- **Basic Navigation:** Over-water cross-country flights



4. ADVANCED & OPERATIONAL TRAINING (3–4 MONTHS)



Specialization based on Fleet needs and performance

Navy training decisively diverges from Army here



FIGHTER (VF)



Location: NAS Miami, NAS San Diego

Aircraft: SNJ, F4F Wildcat, F6F Hellcat

- Intensive dogfighting
- Air-to-air gunnery
- Strafing runs
- Tactical formation

SCOUT/DIVE BOMBER (VS/VB)



Aircraft: SNJ, SBD Dauntless

- Precision bombing
- Glide bombing
- Scouting procedures
- Dive attack techniques

TORPEDO BOMBER (VT)



Aircraft: SNJ, TBD/TBF Avenger

- Low-level navigation
- Torpedo attack runs
- Multi-engine basics
- Over-water ops

PATROL/SEAPLANES (VP/VOS)



Aircraft: PBY Catalina, SNB

- Multi-engine training
- Long-range navigation
- Anti-submarine warfare
- Ship recognition



THE CULMINATING EVENT: CARRIER QUALIFICATION (CQ)



Location: USS Wolverine/USS Sable (Lake Michigan) or fleet carrier

THE DEFINING RITE OF PASSAGE

- ▶ Execute SIX successful "traps" (arrested landings) and takeoffs
- ▶ Ultimate test of judgment, precision, and nerve
- ▶ **CRITICAL:** Failure here could wash out a pilot even at this late stage
- ▶ What separated Navy from Army pilots



5. FLEET ASSIGNMENT & SQUADRON "WORK-UP"



Graduation: Commissioned as Ensign or Naval Aviator

WINGS OF GOLD AWARDED

- ▶ Report to Replacement Air Group (RAG) or frontline squadron
- ▶ Intensive "work-up" training:
- ▶ Advanced combat tactics
- ▶ Current enemy tactics
- ▶ Full carrier air group operations
- ▶ **Result:** Combat-ready Naval Aviator