

UNITED STATES AIR FORCE
GROUND ACCIDENT INVESTIGATION
BOARD REPORT



FITNESS ASSESSMENT FATALITY

346th TRAINING SQUADRON,

37th TRAINING WING

JOINT BASE SAN ANTONIO-LACKLAND TEXAS



LOCATION: NAVAL BASE VENTURA COUNTY, CALIFORNIA

DATE OF ACCIDENT: 4 AUGUST 2025

BOARD PRESIDENT: BRIGADIER GENERAL PAUL G. FILCEK

Conducted IAW Air Force Instruction 51-307

CUI

APR 16 2026

ACTION OF THE CONVENING AUTHORITY

The report of the ground accident investigation board, conducted under the provisions of AFI 51-307, *Aerospace and Ground Accident Investigations*, that investigated the 4 August 2025 mishap, at 346th Training Squadron, Naval Base Ventura County – Port Hueneme, California involving the post-fitness assessment death of an Airman trainee, substantially complies with applicable regulatory and statutory guidance and on that basis is approved.

A handwritten signature in black ink, appearing to read 'CJQ', with a stylized flourish at the end.

CLARK J. QUINN
Lieutenant General, USAF
Commander, Air Education & Training Command

CUI

**EXECUTIVE SUMMARY
UNITED STATES AIR FORCE
GROUND ACCIDENT INVESTIGATION**

**PHYSICAL TRAINING FATALITY
NAVAL BASE VENTURA COUNTY, CALIFORNIA
4 AUGUST 2025**

On 4 August, 2025, at approximately 1712 local time (L) at Naval Base Ventura County-Port Hueneme (NBVC-PH), California, the Mishap Airman (MA), a 27-year-old Regular Air Force (RegAF) Airman First Class (A1C) in training at the 346th Training Squadron (346 TRS), NBVC-PH, collapsed after completing the 1.5-mile timed run component of a monthly training fitness assessment. The MA was immediately unconscious and unresponsive. Within seconds, fellow students rendered aid by placing the MA on his side in the recovery position to apply sternal rubs, and then the supine position to begin Cardio-Pulmonary Resuscitation (CPR) while the Military Training Leader (MTL) ran to the scene. Once on scene, the MTL directed a student to call 9-1-1, directed another to retrieve the squadron's automated external defibrillator (AED), checked for airway, breathing and circulation, and took over CPR. The AED was kept nearby for fitness testing. However, when a student (SW1), who was trained and qualified in AED usage, turned it on, the AED powered back off immediately and failed to restart. The MTL continued uninterrupted CPR until fire and medical personnel arrived and assumed resuscitation efforts.

NBVC-PH Security Division Patrolmen arrived at 1716L and assumed compressions while the MTL delivered rescue breaths. Shortly thereafter, the first dispatched fire truck arrived and firefighters took over CPR rotations at 1719L. An Emergency Medical Service (EMS) Team from Gold Coast Ambulance Service arrived at 1722L and took over the scene, immediately placing their Advanced Life-Support (ALS) AED and continuing with CPR. The ALS AED analyzed a shockable rhythm, ultimately resulting in 13 shocks total. During this time, responders requested additional manpower to help with compressions, resulting in Ventura County Fire Station 53 arriving with additional EMS personnel. This team placed a Lund University Cardiopulmonary Assist System (LUCAS) device for compressions at 1740L and intubated the MA to improve oxygen delivery. The responders also administered resuscitative medications to include epinephrine and lidocaine. The Patrolmen, MTL, two sets of Fire Crews with six EMTs and a paramedic, and an EMS Team performed 65 minutes of resuscitation efforts. At 1822L, the lead paramedic, in consultation with his off-site on-call hospital physician (medical director equivalent) pronounced the MA deceased.

Following the MA's death, an autopsy was completed at the Ventura County Medical Examiner's Office. The Medical Examiner (ME) determined the cause of death to be sudden cardiac arrest due to probable exercise-induced cardiac arrhythmia. The MA had no known diagnoses for any conditions or illnesses; however, through a physical examination, the ME uncovered smaller caliber coronary arteries than expected relative to MA's size and sex. Additional genetic testing detected four heterozygous variants of uncertain significance with known cardiac associations. The presence of the multiple cardiac gene variants was considered contributing. The manner of death was declared as natural.

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS	iii
SUMMARY OF FACTS	1
1. AUTHORITY AND PURPOSE	1
a. Authority	1
b. Purpose	1
2. ACCIDENT SUMMARY	1
3. BACKGROUND	2
a. Air Education and Training Command (AETC)	2
b. Second Air Force	2
c. 37th Training Wing	2
d. 37th Training Group	2
e. 346th Training Squadron	2
f. Naval Base Ventura County, Port Hueneme	3
g. Navy Region Southwest Fire & Emergency Services	3
h. Ventura County Fire Protection District	3
i. AMR/Gold Coast Ambulance Service	3
j. Air Force Physical Fitness Program	3
k. Sudden Cardiac Death (SCD)	4
l. Sudden Cardiac Arrest (SCA) Care: Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED)	5
4. SEQUENCE OF EVENTS	6
a. Summary of Background and Events Preceding the Mishap	6
b. Summary of the Mishap and Immediate Response	6
c. Medical Response and Treatment	7
d. Search and Rescue	7
e. Recovery of Remains	7
5. MAINTENANCE	7
a. Maintenance Documents	7
b. Maintenance Forms	8
c. Scheduled Inspections	8
d. Maintenance Procedures	8
e. Unschedule Maintenance	8
f. Maintenance Personnel and Supervision	8
6. EQUIPMENT, VEHICLES, FACILITIES, AND SYSTEMS	8
a. Facilities	8
b. Equipment	8

7. ENVIRONMENTAL CONDITIONS	9
a. Forecasted Weather	9
b. Observed Weather	9
c. Other Environmental Conditions	9
d. Restrictions, Warnings, and Procedures	9
8. PERSONNEL QUALIFICATIONS	10
a. Mishap Airman (MA)	10
b. Military Training Instructor (MTL)	10
c. Medical Personnel	10
9. MEDICAL FACTORS	10
a. Health Summary	10
b. Injuries and Medical Conditions Sustained in the Mishap	11
c. Pathology	11
d. Lifestyle	11
10. OPERATIONS AND SUPERVISION	11
a. Operations	12
b. Supervision	12
11. GOVERNING DIRECTIVES AND PUBLICATIONS	12
a. Publicly Available Directives and Publications Relevant to the Mishap	12
b. Known or Suspected Deviations from Directives or Publications	12
INDEX OF TABS	13

ACRONYMS AND ABBREVIATIONS

2 AF	Second Air Force	LT COL	Lieutenant Colonel
A1C	Airman First Class	LUCAS	Lund University Cardiopulmonary Assist System
ABC	Airway Breathing Circulation	MA	Mishap Airman
AED	Automated External Defibrillator	MA2	Master-At-Arms Second Class
AETC	Air Education and Training Command	MD	Doctor of Medicine
AF	Air Force	MDT	Mobile Data Terminal
AFB	Air Force Base	ME	Medical Examiner
AFI	Air Force Instruction	MEPS	Military Entrance Processing Station
AHA	American Heart Association	MOU	Memorandum of Understanding
ALS	Advanced Life Support	MP	Military Police
AMR	Gold Coast Ambulance Service	MPH	Miles Per Hour
AM	Ante Meridiem	MT	Montana
AMN	Airman	MTE	Medical Technology Examiner
ASVAB	Armed Services Vocational Aptitude Battery	MTL	Military Training Leader
AUG	August	MX	Maintenance
AV	Atrioventricular	NBVC	Naval Base Ventura County
BDM	Breath Delivery Mask	NBVC-PH	Naval Base Ventura County – Port Hueneme
BLS	Basic Life Support	NCIS	Naval Criminal Investigative Service
BMI	Body Mass Index	NCOIC	Non-Commissioned Officer in Charge
BMT	Basic Military Training	NEX	Navy Exchange
BVM	Bag Valve Mask	NMS	National Medical Services
CA	California	NPS	Non-Prior Service
CAC	Common Access Card	OHCA	Out of Hospital Cardiac Arrest
CARES	Cardiac Arrest Registry to Enhance Survival	OI	Operating Instruction
CE	Civil Engineering	OSI	Office of Special Investigations
CNRSWF&ES	Navy Region Southwest Fire & Emergency Services	PAD	Public Access Defibrillator
CPR	Cardiopulmonary Resuscitation	PEA	Pulseless Electrical Activity
COL	Colonel	PFA	Physical Fitness Assessment
CQ	Charge of Quarters	PH	Port Hueneme
DAF	Department of the Air Force	PHA	Periodic Health Assessment
DAFMAN	Department of the Air Force Manual	PM	Post Meridiem
DCOP	Defense Chief of Police	PRDA	Personnel Records Display Action
DOD ID	Department of Defense Identification	PT	Physical Training
ECN	Engineering Change Notice	PTL	Physical Training Leader

EMS	Emergency Medical Service	RegAF	Regular Air Force
EMT	Emergency Medical Technician	SA	Sinoatrial
F	Fahrenheit	SC	Squadron Commander
FAQ	Fitness Assessment Questionnaire	SCA	Sudden Cardiac Arrest
FC	Fire Crewman	SCD	Sudden Cardiac Death
FDA	Food and Drug Administration	SECO	Security Officer
F&ES	Fire and Emergency Services	SEL	Senior Enlisted Leader
FMNA	Fleet Management and Analysis	SGT	Sergeant
FSS	Force Support Squadron	SIB	Safety Investigation Board
G6PD	Glucose-6-Phosphate Dehydrogenase	SUD	Sudden Unexplained Death
GAIB	Ground Accident Investigation Board	SW	Student Witness
GCAS	Gold Coast Ambulance Service	TCCC	Tactical Combat Casualty Care
GPC	Government Purchase Card	TRG	Training Group
GSU	Geographically Separated Unit	TRS	Training Squadron
HQ	Headquarters	TRW	Training Wing
HIIT	High Intensity Interval Training	TSGT	Technical Sergeant
IAW	In Accordance With	TT	Technical Training
ID	Identification	TX	Texas
IO	Investigating Officer	UFPM	Unit Fitness Program Manager
JA	Judge Advocate	USAF	United States Air Force
	Operations and International Law		
JAOA	Directorate – Aviation and Admiralty Torts	USC	United States Code
JBSA	Joint Base San Antonio	VC	Ventura County
kg/m2	Kilogram-Square Meter	VF	Ventricular Fibrillation
L	Local Time	VF/VT	Ventricular Fibrillation/Ventricular Tachycardia
LA	Legal Advisor	WBGT	Wet Bulb Globe Temperature
LRS	Logistics Readiness Squadron	WOT	Week of Training

SUMMARY OF FACTS

1. AUTHORITY AND PURPOSE

a. Authority

On 22 August 2025, Lieutenant General Brian S. Robinson, Commander of Air Education and Training Command (AETC), convened a Ground Accident Investigation Board (GAIB) and appointed Brigadier General Paul G. Filcek to conduct an investigation into the relevant facts and circumstances of the 4 August 2025 death of the Mishap Airman (MA) who died from medical complications following a physical training (PT) event at Naval Base Ventura County-Port Hueneme (NVBC-PH), California (CA) (Tab [Y-3](#) to [Y-4](#)). The Board convened from 8 September 2025 to 20 September 2025, conducted in accordance with Air Force Instruction (AFI) 51-307, *Aerospace and Ground Accident Investigations*, dated 18 March 2019 (Tab [BB-29](#) to [BB-30](#)). Board members included the Board President (Brigadier General), medical advisor (Colonel), legal advisor (Lieutenant Colonel), and recorder (Master Sergeant) (Tab [Y-3](#)).

b. Purpose

In accordance with AFI 51-307, *Aerospace and Ground Accident Investigations*, this GAIB conducted a legal investigation to inquire into all the facts and circumstances surrounding this Air Force ground accident, prepare a publicly releasable report, and obtain and preserve all available evidence for use in litigation, claims, disciplinary action and adverse administrative action (Tab [BB-28](#)).

2. ACCIDENT SUMMARY

On 4 August, 2025, at approximately 1712 local time (L) at Naval Base Ventura County-Port Hueneme (NBVC-PH), California, the Mishap Airman (MA), a 27-year-old (Tab [V-24.2](#)) Regular Air Force (RegAF) Airman First Class (A1C) in training at the 346th Training Squadron (346 TRS) (Tab [T-7](#)), NBVC-PH, collapsed after completing his 1.5-mile run component of his practice Physical Fitness Assessment (Tab [V-1.6](#), [V-4.4](#), [V-6.5](#)). The MA was unconscious and unresponsive followed by loss of breathing and no pulse (Tab [V-2.6](#), [V-3.4](#) to [V-3.5](#), and [V-16.6](#)). Fellow students and the Military Training Leader (MTL) performed initial life-saving efforts followed in rapid succession by NBVC-PH Security Division Patrolmen, on-base Station 73 fire fighters, Gold Coast Ambulance Service, and fire fighters from Ventura County Fire Station 53 (Tab [V-1.8](#) to [V-1.10](#), [V-6.6](#) to [V-6.7](#), [V-16.7](#), [V-16.9](#), and [V-16.14](#)). The initial response was immediate, and the MA received over 65 minutes of uninterrupted resuscitation efforts by the students, the MTL, Patrolmen, fire crews consisting of paramedics and EMTs, and an ALS EMS Team (Tab [X-10](#) and [X-25](#)). The lead paramedic, in consultation with the on-call physician as required by their protocol, pronounced the MA dead at 1822L (Tabs [B-12](#) and [X-10](#)).

3. BACKGROUND

a. Air Education and Training Command (AETC)

AETC is the Air Force's oldest Major Command and is responsible for the recruiting, training, and educating of Airmen. Headquartered at JBSA-Randolph near San Antonio, TX, AETC consists of more than 51,000 personnel (Tab [CC-9](#)).



b. Second Air Force (2 AF)

The 2 AF training mission includes Basic Military Training (BMT) and technical training for 93% of the Air Force, including aircraft and vehicle maintenance, civil engineering, special warfare, air traffic control, security forces, medical services, personnel, and intelligence. 2 AF is headquartered at Keesler AFB, Mississippi.



c. 37th Training Wing (37 TRW)

37 TRW is the largest Training Wing in the Air Force and graduates 80,000 students each year, including all basic military trainees. The wing consists of four training groups and one Academy (Tab [CC-11](#)). Headquartered at Joint-Base San Antonio (JBSA) - Lackland, Texas, 37 TRW employs 2,463 personnel (Tab [CC-11](#)).



d. 37th Training Group (37 TRG)

37 TRG operates technical schools for 18 specialties, offering over 130 courses. The group is headquartered at JBSA-Lackland, TX, and consists of seven squadrons, including four geographically separated units at Fort Leonard Wood, Missouri, Fort Gregg-Adams, Virginia, Wright-Patterson AFB, Ohio, and Port Hueneme, California. (Tab [CC-12](#))



e. 346th Training Squadron (346 TRS)

346 TRS provides initial and supplemental training for Vehicle Maintenance and Management professionals. The 346 TRS is located at Port Hueneme, California (Tab [CC-13](#)), on Naval Base Ventura County, California (Tab [CC-14](#)).



f. Naval Base Ventura County (NBVC), Port Hueneme

NBVC is a major shore warfighting platform; providing sustained ready forces to deploy, fight, and win. Composed of three operating facilities: Point Mugu, Port Hueneme and San Nicolas Island and home of the Pacific Seabees, West Coast E-2D Hawkeyes, three warfare centers and 110 tenant commands (Tab [CC-14](#)).



g. Navy Region Southwest Fire & Emergency Services

Navy Region Southwest Fire & Emergency Services (CNRSW F&ES) provides an all-hazards approach to protect the lives and property of the residents, businesses, and visitors of its coverage area within the southwest region of the United States (Tab [CC-15](#)).



h. Ventura County Fire Protection District

Composed of approximately 658 dedicated men and women, the Ventura County Fire Protection District (commonly known as the Ventura County Fire Department) is an all-hazard, full-service special district operating under the Fire Protection District Law of 1987 (Tab [CC-16](#)). With the second responding truck coming from Station 53, the drive was less than 1.5 miles (Tab [CC-19](#)).



i. AMR/Gold Coast Ambulance Service

Gold Coast Ambulance Services provides Emergency and non-emergency Medical Transport Services (EMS) to the Ventura County, California area (Tab [CC-17](#)).



j. Air Force Physical Fitness Program

The USAF maintains a Physical Fitness Assessment (PFA) program to ensure its members remain physically fit (Tab [BB-5](#)). To assess physical fitness, the USAF historically has used a three-component PFA: counted repetitions of push-ups in one minute, counted repetitions of sit-ups in one minute, and a timed 1.5 mile run (Tab [BB-6](#)). Recent changes to the Air Force Fitness Program have added optional components, including a shuttle run, hand-release pushups, reverse crunches, and forearm planks (Tab [BB-4](#)). A 2.0-kilometer walk is available for members not medically cleared for the run (Tab [BB-6](#)). PFA scores are based on age and gender (Tab [BB-5](#)). Minimum scores required to pass are set for each component and for composite scores (Tab [BB-6](#)). A score below the minimum value for any component, or a composite score below 75 is a failure and the member must test again in 90 days; a score between 75 and 89.9 is deemed Satisfactory and the member must test again in six months; a score above 90 is Excellent and the member must test again in one year (Tab [BB-8](#) to [BB-9](#)). PFA administrators are required, when conducting official PFAs, to have an AED present within the building or within 100 feet until all PFA participants leave the area (Tab [BB-7](#)).

Second Air Force (2 AF) has supplemented the Department of the Air Force Manual (DAFMAN) on physical fitness and issued additional guidance regarding fitness requirements for members in Basic Military Training (BMT) and Technical Training (TT) (Tab [BB-11](#) to [BB-16](#)). TT Commanders are required to ensure TT Students adhere to physical fitness requirements (Tab [BB-12](#)). Units are required to conduct PT sessions at least three times a week with non-prior service (NPS)—those students with no prior military experience (Tab [BB-13](#)). NPS students are required to complete a passing PFA prior to graduation from Technical Training (Tab [BB-13](#)). MTLs are authorized to administer these PFAs because the fitness assessment is explicitly a training requirement and results are not officially recorded in myFitness, the Air Force system of record for official PFAs (Tab [BB-13](#)). Note, students do not complete the Fitness Assessment Questionnaire (FAQ) prior to these unofficial PFAs (Tab [V-16.3](#)). NPS students are required to meet or exceed Air Force minimum values for pushups, sit-ups, and the timed 1.5- mile run, and the minimum values for overall component scores (Tab [BB-13](#)). The 346 TRS conducts monthly training PFAs for its TT students to ensure compliance with 2 AF policy (Tab [BB-12](#) to [BB-13](#)).

k. Sudden Cardiac Death (SCD)

The relationship between Sudden Cardiac Arrest (SCA) and SCD is described in a foundational report of the American College of Cardiology/American Heart Association (Tab [X-5](#)). In this guideline, Dr. Al-Khatib et al describe SCA as the sudden cessation of cardiac activity so that the person becomes unresponsive, with no normal breathing and no signs of circulation (Tab [X-5](#)). If corrective measures are not taken rapidly, this condition progresses to sudden cardiac death (SCD) (Tab [X-5](#)). This report explains SCA and SCD can result from causes other than ventricular arrhythmias (irregular heartbeat), such as bradyarrhythmias (slow heartbeat), electromechanical dissociation (heart's electrical system is functioning without triggering the heart to pump blood), pulmonary embolism (blood clot in the lung), intracranial hemorrhage (bleeding in the brain), and aortic dissection (tear in the body's main artery) (Tab [X-5](#) to [X-6](#)). For individuals less than 40 years of age, Drs. Tseng and Nakasuka cite the annual risk of out-of-hospital cardiac arrest (OHCA) is 4.2 to 7.8 per 100,000 person-years worldwide (Tab [X-6](#)). They further found autopsy-based studies demonstrate that 55% - 69% of young adults with presumed sudden cardiac death have underlying cardiac causes (Tab [X-6](#)). This would include sudden arrhythmic death syndrome, a condition most common in athletes, where the heart has no visible abnormality when there is an abnormality in the heart's electrical system and also structural heart disease, such as coronary artery disease (Tab [X-6](#)). Furthermore, genetic cardiac disease such as long QT syndrome (heart's electrical system takes longer than normal to recharge between beats) or dilated cardiomyopathy (enlarged heart) has been found in non-survivors at a rate of 13%-34% with autopsy-confirmed sudden cardiac death (Tab [X-6](#)). It was concluded that, among young adults who have had cardiac arrest outside of a hospital, only 9%-16% survive to hospital discharge (Tab [X-6](#)). According to Albert et al, the risk of SCA is transiently increased during and up to 30 minutes after strenuous exercise compared with other times, however the actual risk during any one episode of vigorous exercise is very low (1 per 1.51 million episodes of exercise) (Tab [X-6](#)).

Among individuals less than 35 years of age who experience SCD, Bagnall et al found 40% have presumed sudden arrhythmic death without structural heart disease identified on autopsy (Tab [X-6](#)). Potential causes of death in this population as described by Eckart et al suggest ion channel mutations and arrhythmias, including Wolff-Parkinson-White, Long QT Syndrome, short QT syndrome, and catecholaminergic polymorphic ventricular tachycardia (Tab [X-6](#)). Abbas et al

describes the analysis of the genes of 113 cases of young persons with unexplained SCD, identifying a clinically relevant cardiac gene mutation in 27% of cases (Tab [X-6](#)). As described by Basso et al, SCD patients without apparent structural heart disease likely do not actually have normal hearts. This article acknowledges that in the past the etiology of many of these deaths was unknown and deemed idiopathic, but now there is growing evidence that post-mortem genetic testing can identify underlying causes at the molecular level that would have otherwise remained unexplained (Tab [X-6](#)). Although interpretation is still limited by complexities of gene expression and penetrance, the autopsy may be the first and only opportunity to establish a correct diagnosis critically important for the surviving family members who, with this information, can be recommended for preventive clinical screening. (Tab [X-6](#)).

1. Sudden Cardiac Arrest (SCA) Care: Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED)

According to the American Red Cross using data from The Cardiac Arrest Registry to Enhance Survival (CARES), survival to hospital discharge from out-of-hospital cardiac arrest (OHCA) after receiving treatment from emergency medical services (EMS) is less than 10% in the United States (Tab [X-6](#) to [X-7](#)). As cited in Panchal et al, survival from SCA dramatically decreases with each minute that passes without CPR and defibrillation (Tab [X-7](#)). In this published guideline, the American Heart Association (AHA) emphasizes that immediate CPR is the single-most important intervention for a patient in cardiac arrest and should be provided until a defibrillator is applied to minimize interruptions in compressions (Tab [X-7](#)). CPR helps to maintain blood flow to the brain and heart, buying time until defibrillation can be administered (Tab [X-7](#)). Without CPR, the heart muscle weakens, and defibrillation becomes less effective (Tab [X-7](#)).

According to the AHA, ventricular fibrillation (VF) is the most common rhythm in adults experiencing SCA and defibrillation with an AED delivers this life-saving electrical shock (Tab [X-7](#)). Longstanding research by Larsen et al concludes that for each minute that passes between collapse and defibrillation, survival from witnessed VF cardiac arrest declines by 7–10% when bystander CPR is not provided (Tab [X-7](#)). When bystander CPR is provided, the decrease in survival is more gradual and averages 3–4% per minute from collapse to defibrillation (Tab [X-7](#)). Bystander CPR has been shown to double or triple the chances of survival from witnessed cardiac arrest at many different intervals to defibrillation (Tab [X-7](#)). Stieglis et al asserts that every minute of delay to first shock is associated with a lower proportion of VF termination and return of organized rhythm (Tab [X-7](#)). Each additional minute in VF from emergency call is associated with 6% higher probability of failure to terminate VF and 4% lower probability of return of organized rhythm (Tab [X-7](#)). Reducing the time interval from emergency call to first shock to ≤ 6 minutes can be considered a key performance indicator of the chain of survival (Tab [X-7](#)). Stieglis et al asserts that every minute of delay to first shock is associated with a lower proportion of VF termination and return of organized rhythm (Tab [X-7](#)). Each additional minute in VF from emergency call is associated with 6% higher probability of failure to terminate VF and 4% lower probability of return of organized rhythm (Tab [X-7](#)). Reducing the time interval from emergency call to first shock to ≤ 6 minutes can be considered a key performance indicator of the chain of survival (Tab [X-7](#)).

4. SEQUENCE OF EVENTS

a. Summary of Background and Events Preceding the Mishap

The MA had taken all components of his initial Physical Fitness Assessment (PFA) in Basic Military Training (BMT) on 22 May 2025 with an overall failing score of 70.8 to include a 1.5-mile run time of 14 minutes and 55 seconds (Tab [T-14](#)). However, the MA had improved his overall score to 91.0 with a run time of 12 minutes and 27 seconds on his final PFA in BMT prior to his 4 July 2025 graduation date (Tab [T-11](#) to [T-12](#)). His run time had improved 2 minutes and 28 seconds, and his overall score placed him in the “Excellent” category of fitness (Tabs [T-11](#) to [T-12](#) and [BB-8](#)). During technical training while assigned as a student to the 346 TRS, the MA’s practice PFAs had resulted in “Excellent” or near-”Excellent” results (Tab [G-3](#) to [G-4](#)).

Shortly before the mishap on 4 August 2025, students of the 346 TRS assembled for their practice Physical Fitness Assessments (PFAs) on the “Grinder”, a location that is a large outdoor parade and exercise pad in the vicinity of dormitory building 1184 (Tab [Z-3](#), [Z-5](#), [Z-7](#) to [Z-8](#), [Z-15](#) to [Z-17](#)). According to testimony, students are afforded an opportunity, prior to practice PFAs, to alert MTLs of any illness or injury that would preclude them from accomplishing the practice PFA (Tab [V-16.3](#) and [V-23.3](#)). There is no evidence that the MA alerted MTLs of any illness or injury.

b. Summary of the Mishap and Immediate Response

Prior to the mishap, all participating students had concluded the pushups and sit-ups portion of their practice PFAs and had either completed the 1.5-mile run or were nearing completion (Tab [V-4.6](#), [V-10.4](#), [V-12.2](#), and [V-14.6](#)). Upon completion of his run (timed at 11 minutes and 54 seconds), the MA proceeded to the recorder to provide his run time (Tab [G-3](#)). Very shortly thereafter, at approximately 1712L, the MA collapsed (Tab [V-1.6](#), [V-9.6](#)). Impacting the concrete, the MA sustained injuries consistent with hitting his face on the ground indicating he had most likely lost consciousness even before impact (Tab [V-1.6](#), [V-9.6](#)). At that point, the MA was lying face down and was both unconscious and unresponsive (Tab [V-1.6](#), [V-3.4](#), [V-5.4](#), and [V-9.6](#)).

The MA’s fellow students SW1, SW3, and SW6 rendered aid immediately, including placing the MA on his side to deliver sternal rubs, and calling out to the MA to elicit a response (Tab [V-1.6](#), [V-3.5](#), [V-5.4](#), [V-6.6](#), [V-12.7](#), [V-14.7](#)). They summoned the MTL (an undetermined student called 9-1-1 at direction of the MTL while SW1 held the phone), retrieved an AED from the adjacent bleachers, placed MA in the supine position, and assisted the MTL in performing CPR (Tab [V-1.6](#), [V-3.5](#), [V-5.4](#), [V-6.6](#), [V-12.7](#), [V-14.7](#), and [V-16.6](#)). One student (SW1) was familiar with the AED and attempted to operate it, but the AED powered down before initiating any patient analysis and subsequently failed to restart (Tab [V-1.7](#), [V-12.7](#), [V-16.6](#), and [V-25.3](#)). The MTL had already checked for airway, breathing and circulation and had determined the absence of breathing and the absence of a pulse, and so he began CPR (Tab [V-1.6](#), [V-3.5](#), [V-5.4](#), [V-10.4](#), [V-12.7](#), and [V-16.6](#)). The 9-1-1 call resulted in the Operator dispatching both fire and ambulance within the first 2 minutes following the MA’s collapse (Tabs [N-3](#), [N-17](#), [N-21](#) and [X-25](#)). The MTL continued CPR uninterrupted until base police, firefighters, and ambulance/EMS teams arrived in rapid succession (Tabs [V-3.5](#), [V-5.10](#), [V-10.4](#), [V-12.7](#), [V-16.6](#), and [N-17](#)).

c. Medical Response and Treatment

The base police (NBVC-PH Security Division Patrolmen) arrived on scene first, in less than 4 minutes after the MA's collapse (Tabs [V-21.2](#), [N-17](#) and [N-21](#)). The patrolmen took over compressions while the MTL performed rescue breaths (Tab [V-1.6](#) and [V-16.7](#)). At approximately 1720L (less than 3 minutes after the police arrived), the county fire crew, comprised of EMTs, from Station 73 arrived reporting into Dispatch (Tabs [V-21.2](#) and [N-17](#)). Gold Coast Ambulance Service EMS Team, a paramedic and an EMT, arrived next, with their presence reported into Fire Dispatch at 1726L (Tab [N-17](#) and [N-21](#)). Just prior to the fire crew utilizing their AED, the Gold Coast EMS Team took lead of the scene between 1720L and 1726L, assumed control of the patient (Tabs [V-16.9](#) to [V-16.11](#)) and immediately applied their ALS version AED (with advanced capabilities as compared to the Fire Crew's AED) (Tab [V-20.4](#) and [V-21.2](#)). The ALS AED was applied, and on analysis of the patient's heartbeat, displayed a rhythm of VF (Tab [X-14](#)). The EMS team proceeded down their cardiac arrest management algorithm delivering multiple shocks (13 total) and epinephrine, while continuing CPR (Tabs [V-21.2](#) and [X-10](#)). Firemen from Station 73 called for additional assistance resulting in Fire Station 53's response from Ventura County Fire Protection, arriving with an additional paramedic, two more EMTs, and a Lund University Cardiopulmonary Assist System (LUCAS) device (a portable device that delivers chest compressions) (Tab [N-17](#)). The Fire Station 53 paramedic intubated the MA to improve oxygen delivery and the Gold Coast paramedic established initial (and continuous) contact with his off-site, on-call hospital physician, in compliance with their protocols for such clinical scenarios warranting prolonged resuscitations (Tabs [B-12](#) and [X-10](#)). After 44 minutes, the MA's cardiac rhythms had changed to asystole (no heartbeat and no electrical activity) or pulseless electrical activity (PEA) and the paramedic, in consultation with the on-call physician, administered lidocaine to the MA (Tab [X-10](#)). Resuscitative measures were continued for another 20 minutes (Tab [X-10](#)). After more than 65 minutes of on-site resuscitation efforts by the students, the MTL, Patrolmen, two sets of fire crews consisting of a paramedic and EMTs, and an ALS EMS Team, the paramedic, in consultation with his on-call physician (medical director equivalent), pronounced the MA dead at 1822L (Tab [X-10](#)).

d. Search and Rescue

Not applicable.

e. Recovery of Remains

The Naval Criminal Investigative Service (NCIS) arrived on scene at 1851L (Tab [N-14](#), [N-17](#) and [N-21](#)). Shortly thereafter, Ventura County Medical Examiner's Office personnel arrived on scene to accomplish a dignified transport of the MA to the Ventura County Medical Office for autopsy (Tab [N-15](#)).

5. MAINTENANCE

a. Maintenance Documents

Not applicable.

b. Maintenance Forms

Not applicable.

c. Scheduled Inspections

Not applicable.

d. Maintenance Procedures

Not applicable.

e. Unscheduled Maintenance

Not applicable.

f. Maintenance Personnel and Supervision

Not applicable.

6. EQUIPMENT, VEHICLES, FACILITIES, AND SYSTEMS

a. Facilities

Reference facility, the 346 TRS conducted the run portion of the PFA at the space nicknamed “Grinder” on NBVC-PH (Tab [V-16.8](#)). The Grinder is a very large, outdoor, level concrete pad located near the front entrance of the base (Tab [Z-15](#) to [Z-17](#)). Cones are used to mark the boundaries for the 1.5-mile run, and the finish line of the run course is near a covered bleachers seating area (Tab [S-13](#) to [S-16](#)). This test was conducted under the 2 AF Guidance Memorandum to DAFMAN 36-2905 and was a training requirement, not an official fitness assessment (Tab [BB-12](#) and [V-16.2](#))

b. Equipment

The 346 TRS purchased the initially attempted AED in July 2023 ([B-25](#)). The machine, a Zoll AED Plus, is FDA-certified (Tab [CC-4](#)) and requires 10 type-123 Lithium batteries, with an estimated service life of 5 years (10-year shelf life) (Tab [CC-3](#)). The board found no evidence that 346 TRS established a formalized program for AED service, maintenance and testing but email traffic indicates shortly after the unit purchased the AED, they attempted to determine whether the Air Force or the Navy would be responsible for AED program management given their status as an Air Force Unit on a Navy installation (Tab [B-15](#) to [B-19](#)). Air Force Instruction 44-117, paragraph 3.1.5.3 states “Geographically Separated Units (GSUs) without a medical unit should seek support of the nearest installation that can provide program oversight and support IAW AFI 25-201, Intra-Service, Intra-Agency, and Inter-Agency Support Agreement Procedures (T-2)”

(Tab [BB-32](#)). Support Agreements between Vandenberg Space Force Base and Naval Base Ventura County on behalf of 346 TRS do not address AED support (Tab [B-31](#) to [B-104](#)).

OPNAV Instruction 11320.23 – Change Transmittal 1, Chapter 5-4 establishes requirements for Navy Fire and Emergency Services (F&ES) to establish installation AED programs with placement in certain locations on Navy installations (Tab [BB-21](#)). Specifically, Navy F&ES must fund, purchase and manage AEDs on specified locations on Navy installations required by the instruction (Tab [BB-23](#)). Navy F&ES is required to test, maintain, repair, and replace all AEDS they own and field, including battery replacement (Tab [BB-23](#)). For AEDs the Navy F&ES does not own and field, the Instruction states “Commands, tenants, and organizations not provided an AED directly by F&ES are encouraged to participate independently in the Public Access Defibrillator (PAD) AED program (Tab [BB-22](#)). PAD AEDs purchased by non-F&ES commands, tenants, organizations or tenants should be compatible with those purchased by F&ES” (Tab [BB-22](#)). Tenant organizations (like 346 TRS) which independently purchase their own AEDs are responsible for installation, testing, maintenance, repair, and replacement, including AED batteries (Tab [BB-23](#)). In summary, both Air Force and Navy regulations encourage geographically separated units to establish AED program support, but both fall short of requiring that they do so (Tabs [BB-21](#) to [BB-23](#) and [BB-32](#)).

7. ENVIRONMENTAL CONDITIONS

a. Forecasted Weather

The forecasted weather for Port Hueneme, California on 4 August 2025 was a low temperature of 59 degrees F, a high of 68 degrees F, partly cloudy in both the morning and the afternoon (Tab [W-3](#)).

b. Observed Weather

The observed weather at Port Hueneme at 1555L (shortly before the 346 TRS training Fitness Assessment) on 4 August 2025 was hazy skies, calm winds, temperature of 67 degrees F, and a dew point of 57 degrees F (Tab [F-3](#)). At 1655L, winds remained calm, the temperature was 68 degrees F, with a dew point of 60 degrees F (Tab [F-3](#)).

c. Other Environmental Conditions

Not applicable.

d. Restrictions, Warnings, and Procedures

There were no relevant heat stress restrictions or warnings in place on 4 August 2025 during the timeline of the mishap (Tab [F-3](#)). Environmental conditions were within allowable criteria to conduct an outdoor PFA: wind speed was less than or equal to 15 miles per hour (mph) sustained or less than or equal to 20 mph gusting; the air temperature was greater than or equal to 34 degrees F; and the Wet Bulb Globe Temperature (WBGT) was less than or equal to 86 degrees F at the start of the run (Tabs [BB-10](#), [F-3](#), and [W-3](#)).

8. PERSONNEL QUALIFICATIONS

a. Mishap Airman (MA)

The MA was a non-U.S. Citizen from Zambia, Africa (Tab [G-5](#) and [G-7](#)) who enlisted in the U.S. Air Force on 13 May 2025 and graduated from Basic Military Training at Lackland Air Force Base, Texas on 4 July 2025 (Tabs [G-7](#) and [T-3](#)). After graduation, the MA traveled directly to the 346 TRS at Naval Base Ventura County, Port Hueneme, to begin his technical school training (Tab [T-7](#)). His classmates described him as having a positive attitude, beginning and ending each day with a smile (Tab [V-14.7](#)).

b. Military Training Instructor (MTL)

The MTL who led the 346 TRS monthly training PFA on 4 August 2025 obtained his PTL-A training and certification on 1 April 2025 and his latest CPR training and certification to include AED operation on 21 July 2025 (Tab [AA-29](#) to [AA-30](#)).

c. Medical Personnel

In addition to the first responder First Aide and Basic Life Support (BLS) care provided by fellow students and the MTL, the MA received medical attention from four groups of medically qualified individuals (Tab [V-16.9](#)). The second class petty officer patrolmen from the Naval Base Ventura County Security Detachment (MP2) assisted with compressions and had current BLS qualifications (Tab [AA-17](#)). Second and third on scene, the Navy Region Southwest Fire and Emergency Services “Fed Fire” Firetruck team consisted of four EMTs and the AMR/Gold Coast Ambulance team consisted of one certified paramedic and one certified EMT (Tab [AA-3](#), [AA-5](#), [AA-9](#), [AA-19](#), [AA-23](#), and [AA-27](#)). When called as additional manpower, the Ventura County Fire Protection District Firetruck team arrived on scene and consisted of one certified paramedic and two certified EMTs (Tab [AA-7](#), [AA-21](#), and [AA-25](#)).

9. MEDICAL FACTORS

a. Health Summary

The MA, prior to this incident, was considered medically qualified for active military service and had no known, significant past medical history (Tab [X-3](#)). MEPS (Military Entrance Processing Station) records documented a negative self-reported medical history and a history of regular physical activity (Tab [X-3](#)). The only documented medical diagnosis was moderate *pes planus* (flat feet) for which he expressed no symptoms (Tab [X-3](#)). When in-processed to basic training in May of 2025, all required screening was completed (Tab [X-3](#)). Of note, the MA did not have sickle cell trait and he had normal levels of Glucose-6-Phosphate dehydrogenase (G6PD) (Tab [X-3](#)). The MA had only two clinical visits outside of routine medical screenings (Tab [X-3](#)). In the third week of BMT, he was seen for symptoms of skin irritation and diagnosed with pseudofolliculitis barbae (skin inflammation caused by shaving) and prescribed a topical scrub to reduce irritation (Tab [X-3](#)). His last medical entry was a visit to Naval Branch Clinic Port

Hueneme in July 2025 for a complaint of itching and rash on his face after shaving (Tab [X-3](#)). All vital signs were normal, MA reported no pain, and his weight was stable from MEPS physical (Tab [X-3](#) to [X-4](#)). No medications were reported, no allergies, and no alcohol or tobacco use (Tab [X-4](#)). He again received a diagnosis of pseudofolliculitis barbae and received a shaving waiver for 90 days (Tab [X-4](#)). The MA did not have an electrocardiogram in his military medical records as he had not had any indication for one either by symptom or occupation requirement (Tab [X-4](#)). He also had not yet completed a Periodic Health Assessment (PHA) due to his short time in the military, having yet to report to his first permanent duty station (Tab [X-4](#)).

b. Injuries and Medical Conditions Sustained in the Mishap

The MA had no known medical conditions before the mishap (Tab [X-3](#) to [X-4](#)). He sustained minor injuries that were consistent with someone who collapsed suddenly: scrapes of his upper and lower lip on the right side, a scrape on his nose, a chipped front tooth, as well as a scrape on his biceps on the right side (Tab [X-4](#)). Cardiac Arrest (non-traumatic) was the medical condition documented by the on-site first responders (Tab [X-10](#)).

c. Pathology

Autopsy was grossly normal other than indeterminate cardiac anomalies (Tab [X-4](#)). The autopsy revealed a normal sized heart with coronary arteries that were described as smaller than expected for an adult male of the MA's size which could have predisposed the MA to a sudden cardiac event, particularly during exertion (Tab [X-5](#)). Genetic testing identified four heterozygous variants of uncertain significance indicating changes in his genes that have been associated with possible hereditary cardiac anomalies (Tab [X-5](#)). Extensive microscopic examination of the vicinity of the cardiac conduction system did not demonstrate any significant microscopic finding (Tab [X-5](#)). The genetic findings of multiple cardiac gene variants was considered by the ME to be contributing factors to the cause of death (Tab [X-5](#)). The cause of death that was documented on the autopsy report based on all available evidence was sudden cardiac arrest due to probable exercise-induced cardiac arrhythmia, and the manner of death was ruled as natural (Tab [X-5](#)).

d. Lifestyle

There is no evidence that lifestyle behaviors were a factor in the accident (Tab [X-4](#)). The MA was known by his fellow students to have healthy eating habits and consistent physical activity (Tab [V-12.6](#) and [V-13.6](#)). Many saw the MA as a mentor often encouraging them to do better with their lifestyle choices (Tab [V-5.6](#) and [V-11.5](#)). There was no indication that the MA took any prescription medications, over the counter medications or supplements (Tab [V-14.9](#) and [V-15.2](#)). The MA did not routinely use alcohol or use tobacco products (Tab [X-4](#) to [X-5](#)). He did fail his first physical fitness test in his first week of basic training, but before graduation his final test scored "Excellent" (Tab [T-16](#)). His last two physical training scores, including the one on the day of the event, improved from near "Excellent" to "Excellent" (89.9 and 93.2) showing a sustained commitment to physical fitness (Tabs [G-3](#) to [G-4](#)).

10. OPERATIONS AND SUPERVISION

a. Operations

The investigation discovered no significant operations evidence.

b. Supervision

As referenced in Para 8.b. of this report, the MTL was trained and current in both Physical Training Leader and CPR to include AED operation (Tab [AA-29](#) to [AA-30](#)). The training PFA events themselves are authorized and required by 2 AF policy (Tab [BB-13](#)). The 346 TRS purchased the AED initially used in the mishap response in July 2023 (Tab [B-25](#)) but did not register it with the Navy/host-installation program or with any Air Force Wing AED program (Tab [B-15](#) to [B-19](#)). Current Air Force and Navy regulations encourage, but do not require the 346 TRS to register or follow Air Force or Navy AED program guidelines (Tabs [BB-21](#) to [BB-23](#) and [BB-32](#)).

11. GOVERNING DIRECTIVES AND PUBLICATIONS

a. Publicly Available Directives and Publications Relevant to the Mishap

- (1) Department of the Air Force Manual 36-2905, *Department of the Air Force Physical Fitness Program*, dated 21 April 2022
- (2) Second Air Force Guidance Memorandum to Department of the Air Force Manual 36-2905, dated 14 July 2025
- (3) Air Force Instruction 44-177, *Public Access Defibrillator Program*, dated 5 June 2014
- (4) Air Force Instruction 51-307, *Aerospace and Ground Accident Investigations*, dated 18 March 2019, with Administrative Changes Memorandum dated 6 April 2023
- (5) Naval Operations Instruction 11320.12H, *Navy Fire and Emergency Services Program* dated 20 May 2025, with Change Transmittal 1 dated 11 July 2025

NOTICE: All directives and publications listed above are available digitally on the Air Force Departmental Publishing Office website at: <https://www.e-publishing.af.mil> or the Department of Navy Issuances website at: <http://www.secnnav.navy.mil/doni/default.aspx>

b. Known or Suspected Deviations from Directives or Publications

Not applicable.

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Date: 2026.03.05 14:36:14 -06'00'
PAUL G. FILCEK
Brigadier General, USAF
President, Ground Accident Investigation Board

INDEX OF TABS

Safety Investigator Information.....	A
Miscellaneous Safety Investigation Board Documents.....	B
Not Used.....	C
Maintenance Report, Records, and Data.....	D
Not Used.....	E
Weather and Environmental Records and Data.....	F
Personnel Records.....	G
Not Used.....	H
Not Used.....	I
Not Used.....	J
Not Used.....	K
Not Used.....	L
Not Used.....	M
Transcripts from Voice Communications.....	N
Not Used.....	O
Damage and Injury Summaries.....	P
AIB Transfer Documents.....	Q
Releasable Witness Testimony.....	R
Releasable Photographs, Videos, and Diagrams.....	S
Personnel Records Not Included in Tab G.....	T
Not Used.....	U
Witness Testimony and Statements.....	V

Weather and Environmental and Environmental Records and Data Not Included In Tab F.....	W
Statement of Injury or Death.....	X
Legal Board Appointment Documents.....	Y
Photographs, Videos, Diagrams, and Animations Not Included In Tab S.....	Z
Accident-Related Duty Documents.....	AA
Applicable Regulations, Directives and Other Government Documents.....	BB
Fact Sheets.....	CC