

UNITED STATES AIR FORCE
GROUND ACCIDENT INVESTIGATION
BOARD REPORT



**78th Force Support Squadron
78th Air Base Wing
Robins Air Force Base, Georgia**



TYPE OF ACCIDENT: Pool Bathhouse Wall Mishap

LOCATION: Heritage Pool Bathhouse, Robins AFB, Georgia

DATE OF ACCIDENT: 22 July 2024

BOARD PRESIDENT: Brigadier General Patrick G. Miller, USAF

Conducted IAW Air Force Instruction 51-307



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OHIO**

18 December 2024

ACTION OF THE CONVENING AUTHORITY

The report of the ground accident investigation board, conducted under the provisions of AFI 51-307, that investigated the 22 July 2024 mishap at the Heritage Pool Bathhouse at Robins AFB, Georgia, involving the fatality of a minor, complies with the applicable regulatory and statutory guidance and on that basis is approved.

LINDA S. HURRY
Lieutenant General, USAF
Deputy Commander

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

**POOL BATHHOUSE WALL MISHAP
ROBINS AIR FORCE BASE, GEORGIA
22 JULY 2024**

On 22 July 2024, at approximately 1508 local time (L), Mishap Minor 1 (MM1) sustained fatal injuries as the result of a partition wall, which fell inside the men's changing area of the Heritage Pool Bathhouse, Building 953, hereinto referred to as the Mishap Site (MS), at Robins Air Force Base, Georgia. Mishap Parent 1 (MP1) brought the Mishap Group (MG), which also included Mishap Minor 2 (MM2), Mishap Minor 3 (MM3), and Mishap Minor 4 (MM4), to the pool; MP1 is a parent to MM1 and MM4. MM2 and MM3 are stepbrothers and are both friends of MM1. MM2 sustained serious injuries, and MM3 sustained minor injuries. MM4 sustained a minor hand laceration. The Heritage Pool is managed by the 78th Force Support Squadron (FSS).

The MG arrived at the Heritage Pool around 1430L, and once settled, began swimming. Lifeguards reported approximately 20-40 patrons using the pool around this time. At 1500L, lifeguards signaled the transition to adult swim. The MG exited the pool. MM1, MM2, and MM4 proceeded into the men's side of the bathhouse. MM3 went to the pool's snack bar, then to the bathhouse, entering as the Mishap Wall (MW) started to fall. Witness testimonies vary regarding what occurred at the MS prior to the MW falling. Scenarios ranged from no one touching the MW to anywhere from 1-3 people climbing the MW.

Around 1508L, lifeguards heard a loud noise emanating from the bathhouse, followed by shouts. Mishap Lifeguard 1 ran into the men's side of the bathhouse and observed a freestanding partition wall – the MW – had fallen toward the MG, damaging the bench attached to the back exterior wall and causing the MW to break along several horizontal seams. The MW struck MM1 and MM2, with MM1 stuck under a portion of the MW and MM2 trapped under the bench connected to the exterior wall. MM3 and MM4 were able to get out of the MW's path.

Mishap Lifeguard 2 called 9-1-1 at approximately 1509L, which dispatched first responders. In parallel, three lifeguards ran into the MS; the remaining lifeguards cleared the pool area. MM4 freed MM2 but was unable to free MM1. MM3 walked out of the MS unassisted, while MM2 was escorted by a lifeguard and sat along the pool fence. MP1, after initially helping uncover MM1, stayed with MM4, eventually removing MM4 from the MS.

Lifeguards freed MM1, assessed injuries, and initiated cardiopulmonary resuscitation until first responders took command of the scene. An automated external defibrillator conducted three analyses, none of which recommended a shock. MM1 was transported to Houston Healthcare, where MM1 was declared deceased. MM2 was transported to Atrium Health Navicent, where MM2 was treated for serious injuries. MM3 and MM4 were released to their parents. The 78th Air Base Wing secured the pool and closed operations for the season.

**SUMMARY OF FACTS
POOL BATHHOUSE WALL MISHAP
ROBINS AFB, GEORGIA
22 JULY 2024**

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 Force Materiel Command (AFMC)	2
b. Air Force Sustainment Center (AFSC).....	2
c. 78th Air Base Wing (78 ABW).....	2
d. 78th Mission Support Group (78 MSG)	2
e. 78th Force Support Squadron (78 FSS)	3
f. Heritage Pool	3
4. SEQUENCE OF EVENTS	3
a. Summary of Accident	3
b. Search and Rescue	5
c. Recovery of Remains	8
5. MAINTENANCE	8
a. Maintenance Documents.....	8
b. Maintenance Forms.....	8
c. Scheduled Inspections	8
(1) Facility Manager Inspection.....	8
(2) Unit Safety Representative Inspection	8
(3) Safety Inspection	9
(4) Pre-Season Inspection	9
(5) Daily Opening, Operational, and Closing Checks	9
(6) Fire Inspection.....	9
(7) Public Health Inspection	10
(8) Bioenvironmental Inspection	10
(9) Public Access Defibrillator (PAD) Program Inspection	10
(10) BUILDER Assessment.....	10
d. Maintenance Procedures	10
e. Unscheduled Maintenance	11
f. Future Maintenance and Repair.....	11
g. Maintenance Personnel and Supervision	12
(1) Facility Managers.....	12

- (2) Structures Shop Personnel..... 12
- 6. EQUIPMENT, VEHICLES, FACILITIES, AND SYSTEMS12
 - a. Equipment12
 - (1) Rescue Equipment..... 12
 - b. Structures15
 - (1) Bathhouse and Mishap Wall 15
 - (2) Bathhouse Wall Evaluation and Analysis 16
 - (3) Condition..... 17
 - c. Systems19
- 7. ENVIRONMENTAL CONDITIONS21
 - a. Forecast Weather.....21
 - b. Observed Weather.....22
 - c. Other Environmental Conditions22
 - d. Restrictions, Warnings, and Procedures22
- 8. PERSONNEL QUALIFICATIONS22
 - a. Lifeguards22
 - b. Emergency Responders.....22
 - c. Treating Physicians23
- 9. MEDICAL FACTORS23
 - a. Health23
 - b. Injuries and Pathology23
 - c. Post-Mortem.....23
 - (1) Medical Examiner Report 23
 - (2) Toxicology Analysis 23
- 10. OPERATIONS AND SUPERVISION24
 - a. Operations24
 - b. Supervision25
- 11. GOVERNING DIRECTIVES AND PUBLICATIONS25
 - a. Publicly Available Directives and Publications Relevant to the Mishap.....25
 - b. Other Directives and Publications Relevant to the Mishap26
 - c. Known or Suspected Deviations from Directions or Publications.....26
- INDEX OF TABS..... 27

ACRONYMS AND ABBREVIATIONS

AIC	Airman First Class
ABC	Airway Breathing and Circulation
ABW	Air Base Wing
ACW	Air Control Wing
ADA	Americans with Disabilities Act
AED	Automated External Defibrillator
AF	Air Force
AFB	Air Force Base
AEDC	Arnold Engineering Development Complex
AFI	Air Force Instruction
AFIMSC	Air Force Installation and Mission Support Center
AFLCMC	Air Force Life Cycle Management Center
AFMAN	Air Force Manual
AFMC	Air Force Materiel Command
AFNWC	Air Force Nuclear Weapons Center
AFRL	Air Force Research Laboratory
AFSAS	Air Force Safety Automated System
AFSC	Air Force Sustainment Center
AFSVC	Air Force Services Center
AKA	Also Known As
ALC	Air Logistics Complex
ALS	Advanced Life Support
AMXG	Aircraft Maintenance Group
ASAP	As Soon as Possible
AWOL	Absent Without Leave
A&E	Architect and Engineer

BE	Bioenvironmental Engineer
BLS	Basic Life Support
BMETS	Bio Medical Equipment Technicians
BP	Board President
CAC	Common Access Card
CBT	Computer-Based Training
CC	Combined Chlorine
CDC	Child Development Center
CE	Civil Engineer
CES	Civil Engineer Squadron
CEG	Civil Engineering Group
CFL	Compact Fluorescent Lamp
CLIN	Contract Line-Item Number
CMU	Concrete Masonry Unit
CP	Civilian Patron
CPTS	Comptrollers Squadron
CPR	Cardiopulmonary Resuscitation
CR	Court Reporter
DAF	Department of the Air Force
DAFI	Department of the Air Force Instruction
DAFMAN	Department of the Air Force Manual
DMLSS	Defense Medical Logistics Standard Support
DSN	Defense Switched Network
DoD	Department of Defense
DPD	N,N-Diethyl-P-Phenylenediamine
EAP	Emergency Action Plan

ECD	Estimated Completion Date
EMS	Emergency Medical Service
EMT	Emergency Medical Technician
EMT-A	Emergency Medical Technician – Advanced
EMT-B	Emergency Medical Technician – Basic
EMT-I	Emergency Medical Technician – Intermediate
EP	Emergency Physician
FAC	Free Available Chlorine
FamCamp	Family Camp
FR	First Responder
FSD	Force Development Flight
FSH	Military and Family Readiness Flight
FSK	Marketing
FSS	Force Support Squadron
FSR	Resource Management Flight
FSW	Community Services Flight
GA	Georgia
GAIB	Ground Accident Investigation Board
Gals	Gallons
GBI	Georgia Bureau of Investigation
GS	General Schedule
HMC	Houston Medical Center
HVAC	Heating, Ventilation, and Air Conditioning
IAW	In Accordance With
ID	Identification
IDIQ	Indefinite Delivery Indefinite Quantity
IMT	Information Management Tool

inHg	Inches of Mercury
ITT	Information, Tickets and Travel
KT	Nautical Miles Per Hour
L	Local
LA	Legal Advisor
Lbs	Pounds
LC	Legal Counsel
LED	Light-Emitting Diode
LG	Lifeguards
Lt	Lieutenant
Lt Col	Lieutenant Colonel
LWOP	Leave Without Pay
MDG	Medical Group
MDM	Medical Member
MICAP	Mission Capable
ML	Mishap Lifeguard
MM	Mishap Minor
MP	Mishap Parent
MPH	Miles Per Hour
MS	Mishap Site
MSG	Mission Support Group
MW	Mishap Wall
MWR	Morale, Welfare, and Recreation
MXM	Maintenance Member
NF	(NAF) Administrative Support Positions
NAF	Non-Appropriated Fund
NCOIC	Non-Commissioned Officer in Charge
NFIRS	National Fire Incident Reporting System
NFPA	National Fire Protection Association
NLT	No Later Than
NN	None Noted
No.	Number
NTP	Notice to Proceed
NWRM	Nuclear War Related Material
ODR	Outdoor Recreation
OI	Operating Instruction

OMRS	Operational Readiness Squadron
OSHA	Occupational Safety and Health Administration
OPR	Office of Primary Responsibility
OSI	Office of Special Investigations
PAD	Public Access Defibrillator
PDF	Portable Document Format
PH	Public Health
pH	Potential of Hydrogen
PII	Personally Identifiable Information
PM	Preventative Maintenance
PM	Project Manager
POC	Point of Contact
ppm	Parts per Million
PSU	Primary Subordinate Units
QoL	Quality of Life
R&O	Requirements and Optimization
RAC	Risk Assessment Code
REC	Recorder
ROBNSAFBI	Robins Air Force Base Instruction
ROTC	Reserve Officers' Training Corp
RFR	Recharge for Resiliency
RFT	Regular Full-Time
RPT	Regular Part-Time
RV	Recreational Vehicle
SABER	Simplified Acquisition of Base Engineer Requirements
SAPR	Sexual Assault Prevention and Response
SC	Scheduled Inspection

SEG	Occupational Safety Section
SEL	Senior Enlisted Leader
SGH	Chief of Medical Staff
SIB	Safety Investigation Board
SME	Subject Matter Expert
SMS	Safety Management System
SOP	Standard Operating Procedures
SOW	Statement of Work
SP	Special Inspection
SPF	Sun Protection Factor
SpO2	Oxygen Saturation
Sq	Square
STEAM	Science, Technology, Engineering, Arts, and Mathematics
TAC	Total Available Chlorine
TPS	Test Pilot School
UMS	United Medevac Solutions
US	United States
USAF	United States Air Force
USR	Unit Safety Representative
UV	Ultraviolet
WR	Wing Representative
Z	Zulu

SUMMARY OF FACTS

1. AUTHORITY and PURPOSE

a. Authority

On 6 August 2024, Lieutenant General Linda S. Hurry, Deputy Commander, Air Force Materiel Command (AFMC), appointed Brigadier General Patrick G. Miller as Board President of a Ground Accident Investigation Board (GAIB) to investigate a Class A Mishap at the Heritage Pool Bathhouse on Robins Air Force Base (AFB), Georgia (GA), on 22 July 2024 (Tab Y-3 to Y-4). The GAIB convened at Robins AFB from 9 September 2024 to 4 October 2024 and was conducted in accordance with (IAW) Air Force Instruction (AFI) 51-307, *Aerospace and Ground Accident Investigations*, dated 18 March 2019. Additional members of the GAIB include a Medical Member (Lieutenant Colonel), a Maintenance Member (NH-03), a Legal Advisor (Major), a Structural Engineering Subject Matter Expert (SME) (GS-14), and a Recorder (Airman First Class) (Tab Y-3 to Y-7).

b. Purpose

IAW 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.

2. ACCIDENT SUMMARY

On 22 July 2024, around 1430 local (L), Mishap Parent (MP1) arrived at the Heritage Pool on Robins AFB, GA, with Mishap Minor 1 (MM1), Mishap Minor 2 (MM2), Mishap Minor 3 (MM3), and Mishap Minor 4 (MM4) (Tab V-6.5). During the 1500L adult swim session, MM1, MM2, and MM4 entered the men's side of the Heritage Pool bathhouse, hereinto referred to as the Mishap Site (MS) (Tab V-21.5 to V-21.6). Varying testimonies exist regarding activities in the MS prior to the Mishap Wall (MW) falling (Tab V-1.18, V-4.6, V-4.9, V-6.8, V-7.19, V-12.4 to V-12.5, V-12.9, V-16.8 to V-16.9, V-21.6 to V-21.7, and V-22.6 to V-22.7). After visiting the pool's snack bar, MM3 entered the bathhouse as the MW fell (Tab V-21.6, and V-22.5 to V-22.6). MM1 and MM2 were struck by the MW, with MM1's lower body partially confined by the MW, and MM2 trapped under the back bench (Tabs V-19.7, V-21.7, and Z-4). MM3 and MM4 were not struck by the MW; however, MM3 suffered an abrasion on the right ankle and a "busted lip" (Tab V-4.6, V-21.7, and V-22.8). MM4 sustained a minor hand laceration (Tab V-6.8). Lifeguards executed the pool's Emergency Action Plan (EAP) - calling 9-1-1, clearing the pool, and initiating recovery efforts inside the MS until first responders arrived (Tabs O-16 to O-19, and V-1.20). MM1 was transported via ambulance to Houston Healthcare, where MM1 was declared deceased (Tab X-3 to X-4). MM2 was transported to Atrium Health Navicent, where MM2 was treated for serious injuries (Tab X-3 to X-4). MM3 and MM4 were released to their parents (Tabs V-4.8 to V-4.9, V-6.7, and X-3 to X-4).

3. BACKGROUND

a. Air Force Materiel Command (AFMC)

AFMC, headquartered at Wright-Patterson AFB, Ohio, delivers war-winning expeditionary capabilities to the warfighter through development and transition of technology, professional acquisition management, exacting test and evaluation, and world-class sustainment of all Air Force Weapon systems. From cradle-to-grave, AFMC provides the work force and infrastructure necessary to ensure the United States maintains the world's most respected Air Force (Tab CC-3).



b. Air Force Sustainment Center (AFSC)

Headquartered at Tinker AFB, Oklahoma, AFSC is one of six specialized centers assigned to AFMC. The mission of the Air Force Sustainment Center is to sustain weapons system readiness to generate airpower for America. The center provides war-winning expeditionary capabilities to the warfighter through world-class depot maintenance, supply chain management, and installation support. The AFSC provides critical sustainment for the AF's most sophisticated weapons systems and software (Tab CC-6).



c. 78th Air Base Wing (78 ABW)

The 78 ABW is the host organization of Robins AFB. The wing is responsible for every service associated with a large base, including force protection, emergency response and management, medical services, airfield operations, facility operations and maintenance, personnel management, communications, logistics readiness, morale and welfare, legal, environmental management, public affairs, and support functions. The base is home to more than 50 mission partners, covering five major commands and three wings, totaling over 22,000 Total Force Airmen (Tab CC-8).



d. 78th Mission Support Group (78 MSG)

The 78 MSG manages and directs essential base operating support functions, which enable effective command, control, and communications; law enforcement; security; civilian and military personnel; education services; family services; information management; childcare and youth activities; community activities; lodging; fitness; food services; and mortuary affairs. In addition, the group provides base-level management of key logistics support and infrastructure to include vehicle management (Tab CC-10).



e. 78th Force Support Squadron (78 FSS)

The 78 FSS executes five functions and services to include force development, community services, military and family readiness, resource management, and marketing (Tab CC-11).



f. Heritage Pool

The Heritage Pool is managed by Outdoor Recreation (ODR), which reports to the 78 FSS Community Services Flight (Tab CC-12). The Heritage Pool is an Olympic sized pool featuring two slides, a climbing wall, and a diving board (Tab O-5). The pool and bathhouse were constructed in 1969 (Tab EE-9). The pool is open from Memorial Day to Labor Day, annually (Tab O-48). The facility is supported by a dedicated bathhouse, which includes separate men's and women's changing areas, restroom facilities, sinks, and showers (Tab Z-18 and Z-21).



4. SEQUENCE OF EVENTS

a. Summary of Accident

On Monday, 22 July 2024, the Heritage Pool, located on Robins AFB, GA, opened for business as scheduled at 1230L (Tabs V-15.5, and DD-3). Seven lifeguards were on duty (Tab V-1.16, and V-7.20). Prior to the pool opening, the lifeguards conducted pre-opening procedures IAW the 2024 Heritage Pool Standard Operating Procedures (SOP), noting no significant issues with the pool or bathhouse (Tabs O-6 to O-9, and V-15.5). The weather was in the mid-80s, partly cloudy, with intermittent rain drizzle; however, weather did not impact pool operations (Tabs V-15.6, and W-7). The deep end of the pool was closed due to an algae issue (Tab V-1.16).

Around lunchtime, MM1 called MM2 to invite MM2 and MM3 to go swimming with MP1, MM1, and MM4 at the Heritage Pool that afternoon; MM1, MM2, MM3, and MM4 are hereinto referenced as Mishap Group (MG) when referring to all individuals together (Tab V-21.4, and V-22.5). MP1 is a parent to MM1 and MM4; MM2 and MM3 are brothers (Tab V-6.3, and V-20.3). MM1, MM2, and MM3 were best friends and hung out on a regular basis since meeting in the 6th grade; MM2 and MM3 are now in 9th grade (Tab V-6.3, V-21.3, and V-22.3).

The MG arrived at the Heritage Pool around 1430L (Tab V-6.5). The MG checked-in at the pool entrance, got settled, and then began swimming (Tab V-1.21, V-21.4 to V-21.5, and V-22.5). At this time, approximately 20-40 patrons were at the pool (Tab V-1.15, and V-12.11 to V-12.12). Of note, MP1, MM1, and MM4 visited the pool about once per week; MM2 and MM3 visited the pool a handful of times as MP1's guest over the past two years (Tab V-6.4, V-21.4, and V-22.3). Everyone in the MG utilized the bathhouse facility prior to 22 July 2024 (Tab V-6.4, V-6.5, V-21.4, and V-22.4).

At approximately 1500L, the on-station lifeguards transitioned to "adult swim" (Tab V-12.9). Adult swim is conducted at the top of each hour for approximately 15 minutes (Tab V-12.9). Only patrons 18 years of age or older are allowed in the pool during this period (Tab V-7.22 to V-7.23). If not participating in adult swim, patrons typically visit the snack bar, go to the

adjacent splash pad, use the bathhouse, return to their towels, or sit along the edge of the pool with their feet in the water (Tab V-7.22 to V-7.23).

When adult swim began, Mishap Lifeguard 3 (ML3) was located on the shallow end of the pool (near Lifeguard Station 2, which oversees the shallow half of the pool) talking to several patrons; Mishap Lifeguard 2 (ML2), Mishap Lifeguard 4 (ML4), and Mishap Lifeguard 5 (ML5) were located near the pool's check-in point (Lifeguard Station 1); Mishap Lifeguard 1 (ML1) and Mishap Lifeguard 6 (ML6) were in the breakroom, located at the back of the bathhouse between the men's and women's sides; and Mishap Lifeguard 7 (ML7) was near Lifeguard Station 3, which oversees the left (or east) side deep end and pool climbing wall, talking to Wing Representative 1 (WR1) and Wing Representative 2 (WR2) about the pool's algae problem (Tabs O-10-O-11, V-1.15, V-12.9, V-13.8, V-15.11, V-19.7, and Z-5).

During adult swim, MP1 was in the pool swimming laps (Tab V-6.5). MM1, MM2, and MM4 went to the bathhouse, while MM3 went to the snack bar – a normal behavior for the MG during adult swim (Tabs V-6.5, V-21.5 to V-21.6, and V-22.5 to V-22.6, and Tab Z- 5). Testimonies vary regarding what occurred at the MS prior to the MW falling (Tab V-1.18, V-4.6 and V-4.9, V-6.8, V-7.19, V-12.4 to V-12.5, V-12.9, V-16.8 to V-16.9, V-20.6, V-21.6 to V-21.8, and V-22.6 to V-22.7). Scenarios range from no one touching the MW to anywhere from 1-3 people climbing on the MW (Tab V-1.18, V-4.6 and V-4.9, V-6.8, V-7.19, V-12.4 to V-12.5, V-12.9, V-16.8 to V-16.9, V-20.6, V-21.6 to V-21.7, and V-22.6 to V-22.7).

MM3, after getting snacks, entered the bathhouse as the MW started to lean (Tab V-22.6). According to MM3, MM2 and MM4 were attempting to hold the MW up, while MM3 moved around to the opposite end of the MW from MM4 to assist (Tab V-22.6 to V-22.7). MM3 stated the MW was too heavy (~3,308 pounds) and moved out of the way (Tabs V-22.7, and EE-20).

An analysis of the MW did not indicate a structural failure (Tabs Z-9 to Z10, EE-15 to EE-17, and EE-24). Instead, based on the structural analysis, the MW fell over then broke along several horizontal seams, while several individual blocks either broke or separated from the MW (Tabs Z-6 to Z-7, EE-15 to EE-17, and EE-24). Additionally, a portion of the MW hit the bench attached to the exterior wall, causing the bench to bow in the middle (Tabs V-7.18, and Z-8). The MW was not anchored to the concrete floor (Tabs Z-10, EE-16 to EE17, and EE-19 to EE-20). The analysis includes seven different loading scenarios, all of which require an external force to be applied to the MW for it to fall (Tab EE-19 to EE-23). At a minimum, an external force of 105 pounds applied perpendicular to the top of the MW is required to cause it to fall (Tab EE-24).

At approximately 1508L, MLs 1, 3, 4, 5, 6 & 7, along with WR1 and WR2, heard a loud noise from the bathhouse (Tab V-1.17, V-7.15, V-9.4, V-12.9, V-13.8, V-15.11, and V-19.7), ML1 and ML3 were closest to the MS, as they were in the breakroom located at the back of the bathhouse (Tabs V-12.9, and Z-5).

ML1 immediately entered the back of the men's side of the bathhouse to determine the cause of the noise and realized the partition wall (a.k.a., the MW) between the sinks and urinals and the changing area had fallen toward the back wall and collapsed (Tab V-12.4 to V12.5, and V-12.9

to V-12.10). ML1 noticed one mishap minor (MM) in the MS, located on the sink side of the MW (Tab V-12.4 to V-12.5). At that point, ML1 ran out of the men's bathhouse, through the breakroom then through the women's side of the bathhouse, to the pool area to alert the other mishap lifeguards (MLs) about the incident (Tabs V-12.11, and Z-11).

b. Search and Rescue

After the MW fell, part of MM1's lower body was pinned under the MW (Tab V-7.16, and V-19.7). MM2 was trapped underneath the back bench (Tab V-21.7). MM3 was not encumbered by the MW but felt overwhelmed by the situation (Tab V-22.7). MM3 eventually walked out of the bathhouse without assistance, shouted for help, and then sat down at the pool's edge near the slide to call Mishap Relative 1 (MR1) (Tab V-22.7). MM4 was not impacted by the MW, and despite being distraught, immediately began removing blocks in an attempt to free MM1 and MM2 (Tab V-6.6, and V-21.7).

In response to ML1's shouts for help, at 1509L, ML2 called 9-1-1, while ML3, ML5, and ML7 ran to the bathhouse (Tabs V-1.17, V-13.8, V-15.11, V-19.7, Z-11, and AA-6). The base Fire Department was notified of the incident at 1511L and in turn, dispatched Engine 9 and Med 34 (ambulance) to the scene at 1512L; First Responder 1 (FR1) also requested Rescue unit vehicle 3 (Tab AA-7 to AA-8). Concurrently, Houston County Emergency Medical Services (EMS) dispatched an ambulance for mutual aid (Tab AA-8).

Once the MLs realized the severity of the accident, ML2 and ML4 cleared the pool, moved patrons away from the MS, and prepared to receive first responders (Tab V-15.11). ML2 and ML4 stayed with the younger patrons until EMS departed the scene (Tab V-15.11).

ML3 and ML7 were the first to enter the MS (Tab V-1.17, V-19.7, and V-19.9). Upon entry, ML3 and ML7 saw two victims – MM1 laying face up partially pinned down by the MW; and MM2 first sitting on the back exterior wall's bench, then walking toward the exit with a visible injury around the right cheekbone area of the face (Tab V-7.16, and V-19.7). ML1 and another ML escorted MM2 from the front of the bathhouse to the fence line immediately to the south of the bathhouse to sit down on the grass (Tab V-12.13, and V-21.8). MM4 ran out of the bathhouse to get MP1 (Tab V-6.5 to V-6.6, and V-22.9).

ML3 and ML7 began removing blocks from MM1 (Tab V-7.17, and V-19.8). MM1 was unconscious; however, for a brief moment MM1 regained consciousness, screamed in pain, seized, and lost consciousness again (Tab V-7.30). ML5 entered the facility and began removing blocks from MM1 before heading back out of the bathhouse to retrieve plastic gloves (Tab V-13.8 to V-13.9). MP1 and MM4 also entered the bathhouse, where MP1 assisted in removing blocks, then lifted MM1 onto the damaged exterior wall bench (Tab V-6.6).

ML5 re-entered the facility and began assessing MM1, who was convulsing on the bench (Tab V-13.9, and V-13.15). MM1 had a pulse, unsteady breathing, and injuries to the head (Tab V-13.9, V-13.15, and X-4). ML5 turned MM1 to clear the airway of potential obstructions due to the extent of the injuries (Tab V-13.9 to V-13.10, and V-13.15). MP1 and ML5 moved MM1 to the floor directly in front of the bench in order to place the patient into a recovery position in another attempt to clear MM1's airway, as well as to prevent MM1 from rolling off the bench

(Tab V-6.6, V-13.9, and V-13.15). Shortly after being placed on the floor, MM1 stopped breathing but still had a pulse (Tab V-13.9, and V-13.15). ML5 initiated rescue breathing utilizing a respiratory mask and reassessed MM1 (Tab V-13.9, and V-13.15). ML5 felt a slight pulse, but shortly after, ML5 no longer detected a pulse (Tab V-13.9, and V-13.15).

Around this time, Civilian Patron (CP) was located outside the bathhouse assessing MM2 and overheard someone ask about an automated external defibrillator (AED); CP advised getting the AED, which ML3 and ML7 retrieved (Tab V-11.5, V-13.15, and V-15.11). ML5 initiated cardiopulmonary resuscitation (CPR), first providing breaths through the respiratory mask, then moving to direct mouth-to-mouth contact. (Tab V-13.9 to V-13.10, and V-13.15).

At approximately 1513L, Security Forces, Fire, and Medical arrived on scene (Tab AA-5 to AA-8). ML2 unlocked the fence and directed the first responders to the MS (Tab V-15.11). As ML5 transitioned to CPR, First Responder 2 (FR2) arrived on scene and initiated chest compressions (Tab V-13.15). FR1 established Incident Command and was directed to the MS (Tabs V-3.7, and AA-8). Prior to entering the MS, FR1 noticed MM2 sitting along the fence (Tabs V-3.7, and AA-8). By-standers indicated MM2 was stable; FR1 entered the MS (Tabs V-3.7; and AA-8).

Upon entry, FR1 observed ML5 and FR2 performing CPR, while MM4 was observed in distress, yelling but appearing uninjured (Tabs V-3.7, and AA-8). FR1 cleared the MS of all non-involved personnel (Tab AA-8). MP1 relocated MM4 to the shower area to pray, and eventually they moved to their car in the parking lot (Tab V-6.6 to V-6.7).

FR1 performed a pulse check on MM1 revealing no clear pulse and requested an AED and suction to clear MM1's airway (Tab V-3.7 to V-3.8). Once the AED arrived, CP opened the device, dried MM1's chest, and applied the pads; after AED analysis, no shock was advised (Tabs V-3.7, V-11.5, and AA-8). FR1 readjusted pads and initiated another AED analysis; no shock advised (Tabs V-3.7, and AA-8). CPR continued, as First Responder 3 (FR3) took over chest compressions from FR2, and responders suctioned MM1's airway (Tabs V-3.8, and AA-8). A third AED analysis advised no shock (Tab V-3.8).

First Responder 4 (FR4) arrived at the MS and assessed MM1; CPR and suction continued, with another chest compression swap - First Responder 5 (FR5) taking over for FR3 (Tabs V-3.8, V-4.4, and AA-8). FR4 directed the second EMS crew to get the backboard and prepare for rapid transport (Tab V-4.4). First responders prepared to relocate MM1 to an ambulance (Tab AA-8). With the MS under control of first responders, CP exited the MS, and FR4 shifted focus to MM2 (Tab V-4.4, and V-11.5 to V-11.6).

MM1 was placed on a backboard, secured, and carried to a stretcher (Tab AA-8). Once MM1 was placed on the stretcher and under EMS care, ML5 disengaged from all response activities (Tab V-13.10, and V-13.15). Another chest compression swap occurred before reaching the ambulance, with First Responder 6 (FR6) replacing FR5 in administering compressions (Tab V-3.8). Once in the ambulance, MM1 was switched from the AED to an EMS cardiac monitor (Tab X-3 to X-4). The ambulance departed the scene at 1532L; advanced life support (ALS) procedures were performed enroute to Houston Healthcare (Tab AA-8, and AA-15). Upon arrival to Houston Healthcare at 1540L, MM1 was moved from the EMS stretcher to an

emergency room (Tabs X-4, and AA-15). Care was turned over to Houston Healthcare at 1541L (Tab AA-8, and AA-15).

In parallel to the response activities at the MS, MLs and FRs were assessing and treating MM2 and MM3 outside the bathhouse (Tabs V-12.13, Z-12, AA-8, and AA-15 to AA-17). Before entering the MS, CP made initial contact with MM2, who was seated along the fence just south of the bathhouse, making sure MM2 was alert and aware due to a visible injury on his head (Tab V-11.5). CP had MM2 remove a shirt to check for chest injuries because MM2 indicated difficulty breathing (Tab V-11.5). Before heading into the MS, CP instructed MM2 to apply pressure to a cheek laceration using the shirt and handed MM2 off to ML1 (Tab V-11.5). When first responders arrived, ML1 was with MM2; ML1 deferred care to First Responder 7 (FR7), who arrived on scene at 1515L (Tabs V-2.5, V-12.13, AA-8, and AA-10). FR7 assessed an injury above the eye, for which FR7 applied a bulky dressing to stop the bleeding (Tab V-2.5). FR7 further assessed MM2 for other injuries, as MM2 appeared to have a difficult time breathing (Tab V-2.5).

At 1516L, FR4 assessed MM2, noting an injury over the eye and shortness of breath (Tabs V-4.6, and AA-16). FR4's greatest concern was the labored breathing (Tab V-4.6). FR7 and First Responder 8 (FR8; from Med51) moved MM2 to an ambulance, placing MM2 on a non-rebreather mask and checking vitals (Tabs V-2.5 to V-2.6, X-3 to X-4, and AA-8). MM2 was transferred from a MED51 crew's stretcher to a Houston EMS crew's stretcher (Tabs V-4.8, and AA-8). At 1534L, Houston EMS took over care of MM2 and at 1600L transported MM2 to Atrium Health Navicent in Macon, GA (Tab AA-8 and AA-16). MM2 was treated for five broken ribs, a punctured lung, and a cut above the right eye; MM2 was in the hospital for 5-6 days (Tabs V-20.5 to V-20.6, and X-3).

At 1518L, FR4 shifted focus to MM3, who was sitting along the edge of the pool just in front of MM2's location (Tabs V-1.8, V-4.6, and AA-17). At the moment of engagement, MM3 was on the phone with MP2 (Tab V-4.8). FR4 assessed an abrasion to the right ankle; later MM3 also identified a "busted lip" (Tab V-4.6, V-20.5, and V-22.8). MP2 stated she was coming to pick up MM3 at the base and to not transport MM3 via ambulance for them to quickly reach MM2, who was being transported to Atrium Health Navicent (Tab V-4.8, and V-20.4 to V-20.5). At 1549L, FR4 transported MM3 to the Robins AFB Visitor's Center, where MP2 assumed care of MM3 (Tabs V-4.8 to V-4.9, V-20.4, and AA-17). FR4 recommended to MP2 that MM3 be evaluated upon arrival to Atrium Health Navicent (Tab V-4.8 to V-4.9).

At 1530L, Security Forces established a crime scene; the scene was transferred to the Office of Special Investigations (OSI) at 1600L (Tab AA-6). OSI took 38 photos, and Alert Photo took 88 photos (Tab AA-6). At some point, the Chaplain Corps arrived on scene (Tab V-3.9). Fire department personnel and equipment departed the scene at 1613L (Tab AA-7). OSI released the scene at 1734L, and the bathhouse was secured (Tabs V-1.20, and AA-6). The installation leadership secured the scene for the pending safety investigation and decided to close the Heritage Pool for the season (Tab V-1.20).

After the mishap, WR2 transported ML5 to Houston Healthcare for an assessment, due to direct exposure to biohazards while performing CPR (Tab V-9.5 to V-9.6). ML5 was met at the

hospital by Mishap Parent 3 (MP3) and Mishap Relative 1 (MR1) (Tab V-13.15). Houston Healthcare assessed and treated ML5 for biohazard exposure (Tab V-13.15).

On Tuesday, 23 July 2024, the 78 FSS Director submitted an Incident Report via the Air Force Services Center's (AFSVC) Serious Incident Reporting webpage (Tab V-8.3). In turn, AFSVC released a Serious Incident Report to HAF/AIS and AFSVC leadership (Tab AA-3).

c. Recovery of Remains

Following transport from MS to Houston Healthcare, MM1 was declared deceased at 1549L on 22 July 2024 from blunt force trauma to the head (Tab X-4).

5. MAINTENANCE

a. Maintenance Documents

The 78th Civil Engineer Squadron (78 CES) is responsible for maintenance and repair of facilities, including the Heritage Pool Bathhouse; standardized preventive maintenance; asset management (facility condition assessments); and the Facility Manager Program (Tabs V-5.3 to V-5.7, and BB-6 to BB-8). At no point did the 78 CES or the Facility Managers assigned to the bathhouse identify or document structural concerns with the MW (Tabs V-1.5, and V-5.8 to V-5.9). ML7 reported they used the benches frequently to change clothes and did not notice any sway or dangers with the MW or benches (Tab V-7.23). Furthermore, the lifeguards used the bathhouse as a storm shelter, spending extended periods of time on the benches attached to the MW without any indication of instability (Tab V-19-11).

b. Maintenance Forms

No maintenance forms relevant to the MW; therefore, this section is not applicable.

c. Scheduled Inspections

(1) Facility Manager Inspection

Facility Managers are required to conduct weekly facility inspections and maintain checklist records in a continuity binder (Tab BB-41 to BB-42). Facility inspections focus on ensuring the building is secure at the end of day, monitoring custodial work, fire safety, and facility manager maintenance, such as changing light bulbs and replacing ceiling tiles (Tabs V-10.3 to V-10.7, and BB-43 to BB-44). The last inspection in the Facility Manager's continuity binder for the bathhouse was dated 28 June 2024 and did not identify any concerns with the MW, nor did a review of the last three years of inspections (Tab U-11 to U-21).

(2) Unit Safety Representative Inspection

Unit Safety Representatives (USR) complete facility inspections and document results (Tab BB-19). Following a records review, supervisor safety inspection reports did not identify any findings associated with the MW (Tab U-11 to U-21). Over the past two years, USRs only identified issues with plumbing, electrical, paper towel dispensers, insects, floors, a toilet stall

partition, a door, and a loose bench on the women's side of the bathhouse (Tab U-11 to U-21). Note: The pool was only inspected during the swim season (Tab U-22).

(3) Safety Inspection

The 78 ABW Safety Office oversees the installation's safety program (Tab BB-18). Specifically, the Occupational Safety section (SEG), formerly known as Ground Safety, is responsible for facilities (Tabs V-10.7, BB-17 to BB-18, and BB-20). For the 78 FSS, the 78 ABW/SEG conducts an annual facilities inspection and participates in a pre-season pool inspection (Tab V-10.3, and V-10.8).

The annual facility safety inspection focuses on housekeeping; walking surfaces; electrical safety; fire protection and prevention; and office and work center safety (Tab U-23 to U-31). Of note, safety inspections do not include any specific items related to masonry walls (Tab U-23 to U-31). The last annual safety inspection report was dated 26 September 2023, with no hazards identified for the bathhouse or MW (Tab U-32 to U-33). Furthermore, annual safety inspections for 2019-2022 had no findings associated with the bathhouse or MW (Tab U-34 to U-43).

(4) Pre-Season Inspection

Before each pool season, ODR initiates a pre-season inspection (Tab V-1.10). This inspection includes Bioenvironmental Engineering (BE), Public Health (PH), 78 CES, and SEG (Tab O-39). 78 FSS, 78 CES, SEG, PH and BE conducted the 2024 pre-season inspection on 20 May with no issues identified (Tabs V-1.10 to V-1.11, and D-28 to D-31). Furthermore, preseason inspections for 2022 and 2023 had no findings associated with the bathhouse or MW (Tab D-18 to D-27).

(5) Daily Opening, Operational, and Closing Checks

Each day the pool is open, lifeguards conduct opening and closing procedures, as well as operational checks every two hours (Tab O-6 to O-9). The opening procedures focus on lifeguard readiness for work, water testing, facility safety, and facility sanitation (Tab O-6 to O-7). The operational checks focus on checking equipment, cleanliness, and alerting the lead lifeguard of any problems identified (Tab O-8). And the closing procedures focus on clearing the pool, storing equipment, setting up the pool vacuum, completing the patron count form, and certifying that all checklist tasks are complete by lead lifeguard signature (Tab O-8 to O-9). Procedures and checks are supposed to be documented on an Air Force (AF) Form 708 (Tab O-6 to O-9). However, the only items routinely logged were the pool water testing results (Tab V-15.7). Documentation for the 2024 season was unavailable for review due to water damage (Tab V-1.13).

(6) Fire Inspection

The 778 CES conducts the annual fire inspections (Tab U-44 to U-46). The annual inspection focuses on identifying, documenting, and reporting fire hazards and fire safety deficiencies (Tab U-44 to U-45). The annual fire inspection report dated 20 June 2023 identified one fire safety deficiency for the bathhouse, which was subsequently confirmed closed in the 3 November 2023 follow-up inspection (Tab U-46 to U-47). The fire safety deficiency was for an incorrect posted phone number and inoperable emergency call boxes; it was not related to the MW (Tab U-46 to

U-47). Furthermore, annual fire inspections for 2002-2022 had no findings associated with the bathhouse or MW (Tab U-44 to U-45).

(7) Public Health Inspection

PH performs monthly inspections during each swim season (Tab V-14.3). During their inspection, PH focuses on sanitation at the pool and bathhouse (Tabs V-14.3 to V-14.6, and O-37). The last PH inspection report was dated 11 June 2024, with no hazards identified for the bathhouse or MW (Tab D-7). Furthermore, PH inspections for 2021-2022, 2023, and 2024 had no findings associated with the bathhouse or MW and were marked satisfactory for facility condition and overall facility rating (Tab D-7 to D-15).

(8) Bioenvironmental Inspection

BE performs sampling and analysis for pool water quality parameters (Tab D-4 and D-5). The inspections for June and July 2024 identified no issues with water quality; no assessment of the bathhouse is conducted (Tab D-4 and D-5). No records were provided for previous years (Tab D-4 and D-5).

(9) Public Access Defibrillator (PAD) Program Inspection

The 78th Operational Medical Readiness Squadron oversees the installation's Public Access Defibrillator (PAD) Program IAW AFI 44-177, *Public Access Defibrillator Program*, conducting a biannual inspection of AEDs positioned across the installation (Tabs O-28, and V-17.5 to V-17.6). Inspections are conducted by the PAD Program Coordinator and PAD Site Coordinator every 24 months, focusing on documentation, training, and maintenance (Tab O-28, O-29, and O-35). Furthermore, the Site Coordinator conducts monthly visual inspections of battery status, pads, and supplies (Tab O-31). The GAIB did not review any records for the Heritage Pool's AED, as the device was not registered with the PAD Program and no documentation was available (Tab V-17.7).

(10) BUILDER Assessment

Facility assessments are conducted by 78 CES every four years (Tab V-5.7). The assessment focuses on physical attributes, condition, usage, and performance of facility components (Tab BB-7). The bathhouse MW was inspected on 25 July 2022 with no deficiencies identified for the component "Wall – Concrete Block" (Tab U-48).

d. Maintenance Procedures

Following a review of RSMMeans® Procedures, the Air Force Preventive Maintenance Task List (AFPMTL) published by the Air Force Civil Engineer Center's Operations Directorate, and the 78 CES preventive maintenance program, no preventive maintenance practices exist for concrete masonry unit (CMU) walls like the MW (Tab V-5.7).

e. Unscheduled Maintenance

Facility Managers identify issues and enter service requests into a computerized maintenance management system, NexGen IT, for any maintenance or repairs associated with their facilities (Tabs V-5.7, and BB-39). In turn, 78 CES validates facility manager-initiated service requests and generates a work task for unscheduled maintenance (Tab V-5.8 to V-5.9).

A records review for the bathhouse of unscheduled maintenance from 19 April 2018 through 30 July 2024 identified 21 plumbing, 13 pest management, 10 paint, 8 electrical, 8 structures, and 5 pavements actions; 1 project; and a custodial and sanitation service request (Tab U-49 to U-51). Only one of the service requests was assessed as a Priority 1 – Emergency (Tab U-49 to U-51). The request was opened on 6 June 2018 for an unstable CMU block wall in the women’s side of the bathhouse, which was completed in-house by the 78 CES on 8 June 2018 (Figure 5.1) (Tabs V-1.4, and U-51). Based on the review and interviews, at no point did the Facility Managers identify a concern with the MW (Tabs U-49 to U-51, and V-1.5).



Figure 5.1: Emergency Repair to Block Wall in Women’s Restroom (Tab Z-13)

f. Future Maintenance and Repair

A project was scheduled to occur after the 2024 pool season for interior painting of floors, walls and ceiling; replacement of all bathhouse fixtures; and replacement of fascia boards (Tab U-52 to U-58). The project did not include any structural work (Tabs U-52 to U-58, and V-1.11 to V-1.12).

g. Maintenance Personnel and Supervision

(1) Facility Managers

The 78 CES is responsible for executing and managing the base Facility Manager Program (Tab V-5.3 to V-5.4). Robins AFB established a local instruction which requires one-time computer-based training upon appointment as a Facility Manager; annual refresher training via a 78 CES hosted town hall; and conducting a weekly facility inspection (Tabs V-5.3 to V-5.5, and BB-39 to BB-44). All units assigned real property facilities must appoint a primary and an alternate facility manager (Tab BB-8). Facility manager training does not include information regarding the PAD program, and the weekly facility inspection checklist does not include any items related to structural components, such as walls (Tab BB-12 to BB-15).

78 FSS assigned three facility managers to the bathhouse, two of which were current on training prior to the mishap date (Tabs V-5.6, and T-6).

(2) Structures Shop Personnel

Repairs to CMU walls are performed by masons or carpenters from the Structures Shop (78 CES) (Tab U-49 to U-51). A list of occupations requiring licenses or certifications in Georgia does not include either carpenters or masons; therefore, there is no specified training or experience requirements associated with these positions (Tab BB-32 to BB-38). Air Force personnel descriptions for masons and carpenters require knowledge of the profession and skill in using tools but do not contain any formal education or training (Tab BB-21 to BB-31).

6. EQUIPMENT, VEHICLES, FACILITIES, AND SYSTEMS

a. Equipment

(1) Rescue Equipment

The rescue equipment used at the Heritage Pool on 22 July 2024 included a First Aid Kit (Figure 6.1), resuscitation mask (Figure 6.3), a rescue board (Figure 6.4), an AED, and a suction unit (which belonged to EMS) (Tabs DD-5, V-3.7, and V-13.15). While on duty, the lifeguards carry their resuscitation masks in their hip packs (Tab V-18.9). During operational hours, the AED is located at the front of the pool near the check-in table at Lifeguard Station 1, the backboard is placed next to Lifeguard Station 4 on the pool deck, and the first aid kit is kept in the storage closet on the poolside of the bathhouse (Tab V-13.15, and V-18.7).



Figure 6.1: First Aid Kit



Figure 6.2: Expired First Aid Kit



Figure 6.3: Resuscitation Mask



Figure 6.4: Rescue Backboard

(a) Function

An AED first determines whether an electric shock is needed after analyzing the heart rhythm (Tab DD-9). If no shockable heart rhythm is detected (ventricular fibrillation or pulseless ventricular tachycardia), “no shock” will be advised, and CPR is resumed (Tab DD-9). MM1 was not found to have a shockable heart rhythm throughout the spectrum of post-incident care (Tab X-3 to X-4). Based on witness testimonies and reports, no one identified any issues or concerns with the AED utilized on 22 July 2024 (Tab V-11.7).

(b) Maintenance

Prior to each season, the Facility Manager purchased new first aid kits (Tab V-1.14). The GAIB Medical Member (MDM) confirmed all items within the first aid kit were current (Figure 6.2) (Tab Z-14).

The Heritage Pool has one AED on site; a back-up AED is maintained by ODR (Tab V-18.8). The Heritage Pool's AEDs were not procured, tracked, inspected, or maintained IAW AFI 44-177, *Public Access Defibrillator Program* (Tabs O-28 to O-32, and V-17.7 to V-17.8). However, as stated, evidence indicates the AED properly functioned (Tabs V-11.7, and X-3 to X-4).

Annually, prior to reopening the pool each season, the AEDs are tested by facility management, the expiration dates on the batteries and pads are examined, the pads are assessed for any damage to the seal, and items are replaced as needed. (Tab V-18.7 to V-18.8). However, no one from the owning unit documented inspections of these AEDs (Tab V-1.14 to V-1.15). These visual checks require documentation, which should include battery status, pads, and supply availability (Tab O-31).

(c) Condition

MDM assessed the condition of the equipment used on scene: the backboard with head and neck immobilization system and torso strap was intact; the suction unit appeared in good condition; and the AED, Philips HS1 (Serial Number: A06C-02415) also appeared in good condition (Tabs X-3, and DD-5). The battery of the AED was removed prior to inspection and therefore, expiration dates and function were not able to be assessed (Figure 6.5) (Tabs X-3, and Z-16). A search was run on the AED serial number, which indicated this device was manufactured in 2006 (Tab U-59). Philips issued a recall on this device in February 2018, due to isolated failures with one of the device's electrical components (a resistor), which could result in the device not delivering a shock (Tab U-60 to U-63). The AED pads used were Philips HeartStart OnSite Adult Smart Pads (M5071A), which expired in February 2021 (Tab Z-17). An additional Philips recall on the M5071A adult AED pads were issued in February 2022 for gel separation from the tin backing when peeled from the plastic liner (Tab U-64 to U-67). Lastly, no post event AED electronic data recording was performed (Tabs O-34, and V-17.8).



Figure 6.5: AED Model Used at Heritage Pool

b. Structures

(1) Bathhouse and Mishap Wall

The bathhouse is a one-story building approximately 55'-4" wide by 31'-0" long and was constructed in 1969 (Figure 6.6) (Tab EE-6 to EE-7). The facility contains a women's bath area on the north half of the building and a men's bath area on the south half (Tab EE-8). Both sides have showers, sinks, toilets, and a changing area (Tab Z-18). The bathhouse also serves as the lifeguards' emergency shelter in the case of inclement weather (Tab O-16).

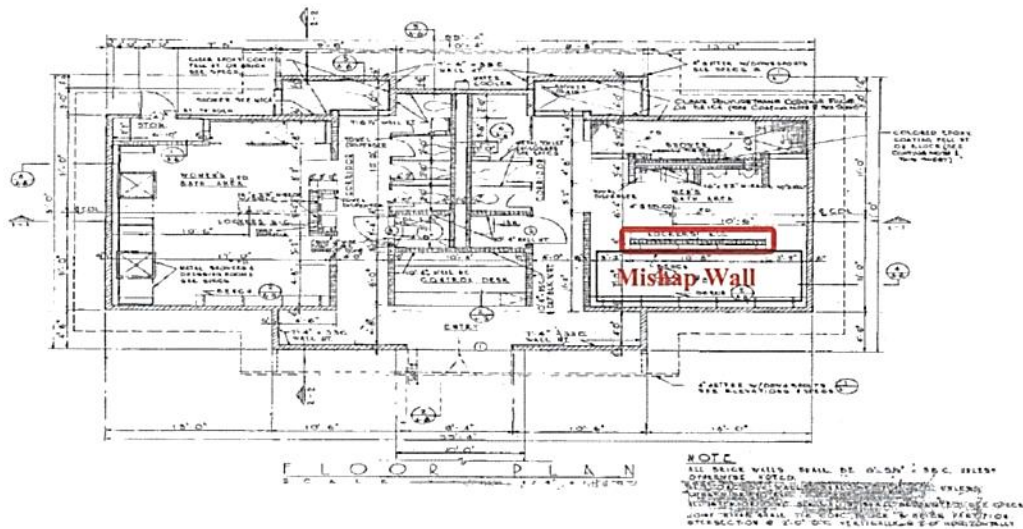


Figure 6.6: Bathhouse Floor Plan (Tab Z-18)

The MW was in the men's side of the facility and was an interior, non-load bearing wall constructed of hollow CMU block (Figure 6.7) (Tabs EE-7, and EE-10). The MW weighed approximately 3,308 pounds (Tab EE-20). The original design shows a single bench on the west side of MW; however, the actual MW, as pictured, has a wooden bench on each side (Tabs EE-8, and Z-9). One bench appears to be original, and the other appears newer (Tab EE-20). The base could not produce any records for installation of the second bench (Tab V-5.8 to V-5.9). Furthermore, evidence indicates no major work was accomplished at the bathhouse or to the MW since initial construction in 1969 (Tab V-1.4).



Figure 6.7: Partition Wall Prior to Mishap (Tab Z-9)

(2) Bathhouse Wall Evaluation and Analysis

Witness testimony and records review indicate no reported or known deficiencies with the MW prior to the mishap (Tab V-1.13, and V-5.9). At approximately 1500L on 22 July 2024, the MW fell in a westward direction (Tab EE-13). A structural evaluation and investigation concluded the designer of record did not follow the code requirements of the *Standard Building Code*, 1965 Edition (Tab EE-24). IAW the *Standard Building Code*, the non-load bearing hollow CMU partition wall required some type of lateral support, which was absent, such as rebar anchors connecting the base of the MW to the floor or vertical supports attaching the sides of the MW to the floor and/or ceiling, to prevent overturning (Figure 6.8) (Tab EE-11, and EE-24). Nonetheless, the MW should not have fallen without an external force being applied to it (Tab EE-20 to EE-21, and EE-24).



Figure 6.8: Partition Wall after Mishap (Tab Z-19)

Varying witness testimonies resulted in an unclear sight picture of activities in the changing area prior to the MW falling (Tab V-1.18, V-4.6 and V-4.9, V-6.8, V-7.19, V-12.4 to V-12.5, V-16.8 to V-16.9, V-20.6 to V-20.7, V-21.6 to V-21.7, and V-22.6 to V-22.7). As such, seven scenarios were analyzed to determine the force required to overturn the MW (See Figure 6.9) (Tab EE-20 to EE-21). Based on the calculations, overturning forces range between 105 pound-force (scenario 1) and 1,544 pound-force (scenario 3) (Tab EE-20 to EE-21).

(3) Condition

As a result of the MW falling, the MW broke along 5-6 separate horizontal joints (Tab Z-4). Additionally, several individual blocks or pieces of block separated from the MW because of the fall and/or recovery operations to free MM1 and MM2 (Tabs V-7.17 to V-7.18, and Z-4). The MW is not repairable. (Tab Z-4). The bench attached to the back exterior wall is also damaged, presumably due to the impact of the MW striking the bench (Tab Z-4). No other visible damage occurred to the facility beyond the MW and bench (Tab Z-4).

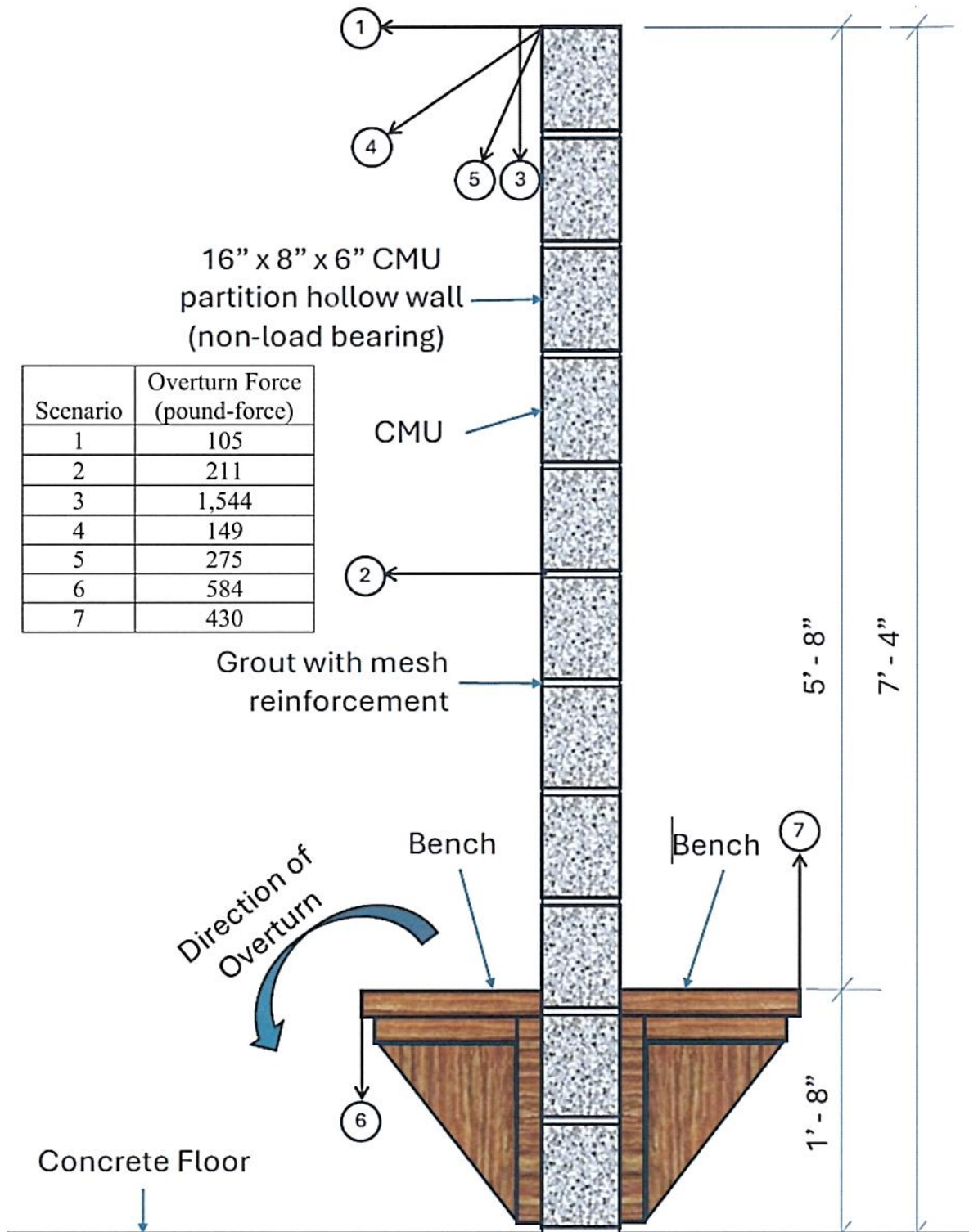


Figure 6.9: Graphical Depiction of CMU Partition Wall Overturn Scenarios (Tab EE-22)

c. Systems

The MS is 13'-10" x 17', with a partition wall, which is the MW, in the middle of the space and benches mounted to three surfaces – the back exterior wall and either side of the MW (Tab Z-20). Opposite one side of the MW are two urinals and two sinks (Tab Z-20). Additionally, the poolside entrance is perpendicular to the bathhouse, preventing a straight path to the MS (Tab Z-21). Patrons enter through a small vestibule, make a 90-degree turn left, walk past the toilets, then make another 90-degree turn left into the bath area (Tab Z-21). The narrowest door is 3'-2" wide (Tab Z-20).

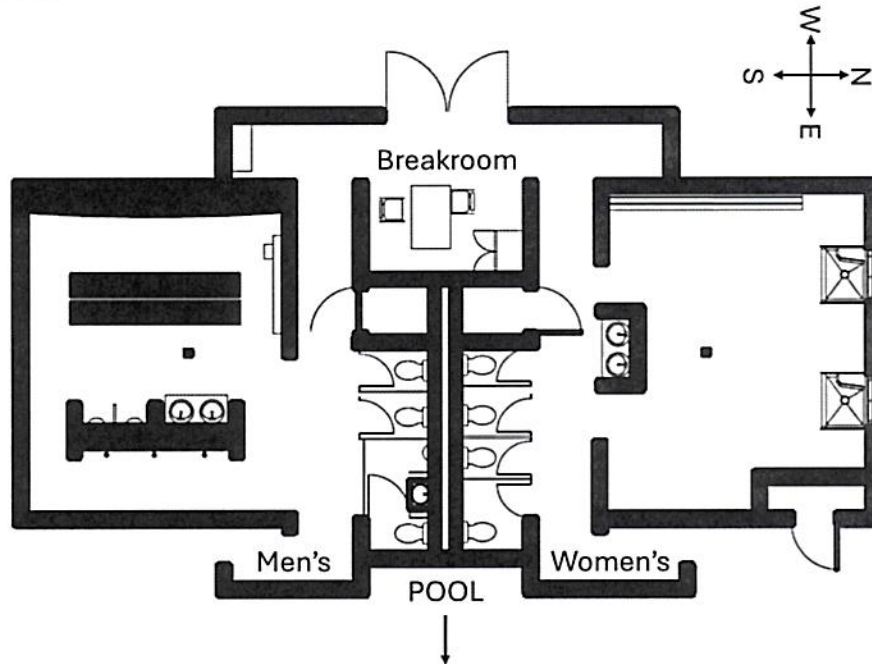


Figure 6.10 Heritage Pool Bathhouse Floorplan (Tab Z-21)

The men's side of the bathhouse is illuminated by ten hanging lights and two wall mounted lights by the sink (Figure 6.11) (Tab Z-22). In the MS, a site visit identified direct light is provided by four of the ten hanging lights, one with a compact fluorescent lamp (CFL) bulb and three with 9-watt light-emitting diode (LED) bulbs (60-watt equivalent); the CFL was not illuminated (Tab Z-22). The two light fixtures above the sink were equipped with 100-watt incandescent light bulbs, one of which was not illuminated (Tab Z-22). Lastly, the artificial lighting was augmented by daylight entering through the gaps between the roof trusses and exterior walls (Tab Z-22).



Figure 6.11 Mishap Site Lighting (Bathhouse Men's Side) (Tab Z-22)

Prior to the pool season, the bathhouse floor was painted and textured to mitigate slipping hazards associated with this type of facility (Tab V-18.4).

Once the MW fell, emergency response efforts were hindered by associated damage to the back bench and MW debris occupying most of the floor space (Figure 6.12) (Tabs V-3.8, V-19.8, and Z-4). Furthermore, as part of the efforts to free MM1 from under the MW, responders discarded CMU blocks into open areas (Tab V-19.8). The damage restricted patient access and limited the number of responders in the confined space (Tab V-3.8, and V-11.5 to V-11.6). Debris was moved to facilitate extraction of MM1 from the MS (Tab V-7.17 to V-7.18, and V-19.9).

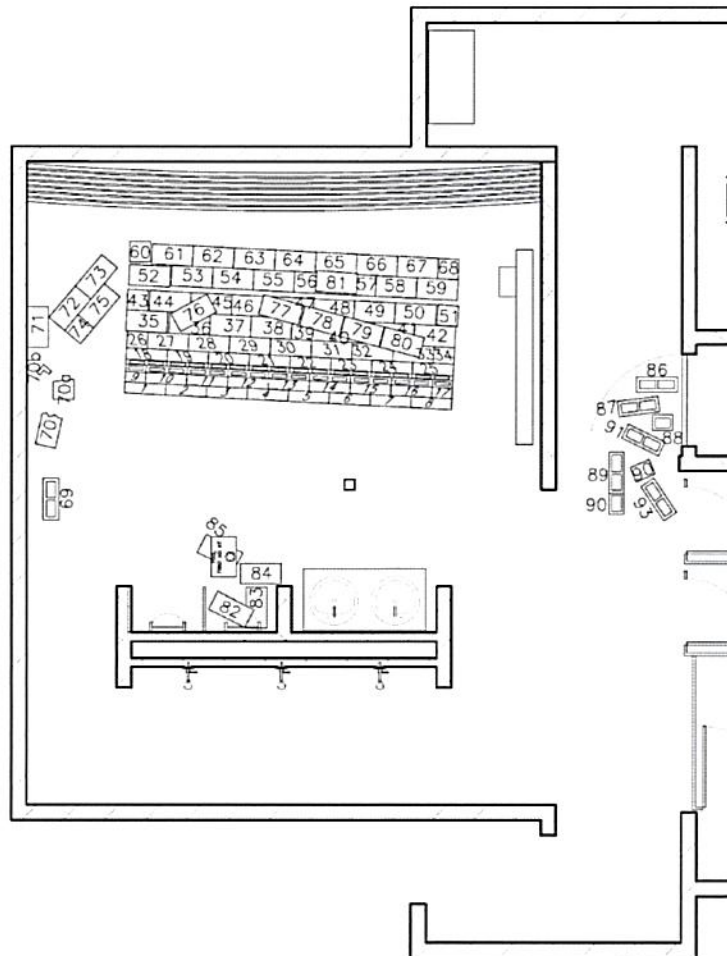


Figure 6.12 Post Mishap Impact Area (Tab Z-4)

7. ENVIRONMENTAL CONDITIONS

a. Forecast Weather

The Robins AFB weather report for 22 July 2024 forecasted a low of 73°F and high of 90°F with mostly cloudy skies in the morning and the potential for afternoon thunderstorms (Tab W-4). Winds ranged from 4-6 miles per hour (Tab W-5).

b. Observed Weather

The observed weather at the time of the mishap was 85-86°F with partly to mostly cloudy skies and intermittent light rain (Tabs V-15.6, and W-7).

c. Other Environmental Conditions

Not applicable to this mishap.

d. Restrictions, Warnings, and Procedures

The weather did not drive any restrictions, warnings, or adjusted procedures for pool operations on 22 July 2024 (Tab V-15.6).

8. PERSONNEL QUALIFICATIONS

a. Lifeguards

On 22 July 2024, the Heritage Pool was staffed by a total of seven lifeguards, including three lead lifeguards (Tab V-1.7 to V-1.8, and V-1.16). All seven lifeguards were current in American Red Cross Lifeguarding with CPR/AED for Professional Rescuers and First Aid, which is valid for two years. (Tabs O-43, and G4 to G10). In addition, each lifeguard participated in at least one hour of in-service training per week, which occurred every Tuesday during the pool season. (Tab V-1.9). Lifeguards at the Heritage Pool are also responsible for opening procedures, operational checks every two hours during opening hours, and closing procedures (Tab O-6 to O-8).

Lifeguard	Seasons Employed	American Red Cross Certification Expiration
ML1	1	05 March 2025
ML2	6	16 August 2024
ML3	1	18 March 2026
ML4	2	31 January 2026
ML5	3	10 August 2025
ML6	1	20 April 2025
ML7	3	01 April 2025

b. Emergency Responders

Given the nature of the incident, several first responders rendered care throughout the event, including personnel from the base’s Security Forces and Fire Department; United Medivac Solutions (UMS) contracted EMS; and a pool patron with experience as an Emergency Room nurse (Tabs V-11.3, X-3 to X-4, AA-6, and AA-8). Following a review of licensing and certifications, all paramedics and emergency medical technicians (EMT) were current in their licensing (Tab T-7 to T-12).

c. Treating Physicians

MM1 and MM2 were transported off base where emergency care was provided by local hospital staff (Tab X-4). MM1 was transported to Houston Healthcare in Warner Robins, GA (Tab X-4). MM2 was transported to Atrium Health Navicent the Medical Center in Macon, GA, then transferred and admitted to Atrium Health Navicent Beverly Knight Olson Children's Hospital (Tabs V-20.6, V-4.3, and X-4).

9. MEDICAL FACTORS

a. Health

The GAIB was unable to review MG medical records (Tab X-3 to X-4). However, there is no evidence indicating the MG's physical or mental health prior to 22 July 2024 had any bearing on the mishap (Tab V-6.4).

b. Injuries and Pathology

MM1 sustained a fatal injury to the head, including face and jaw trauma (Tab X-3 to X-4). MM1 was transported to Houston Healthcare, Warner Robins, GA where emergency physician (EP) pronounced him dead at 1549L (Tab X-4).

MM2 sustained serious injuries to include five rib fractures, punctured lung, bruised liver and pancreas, and a laceration above the eyebrow (Tab V-20.5). MM2 was transported to Atrium Health Navicent in Macon, GA, then was admitted to Atrium Health Navicent Beverly Knight Olson Children's Hospital for five nights (Tab V-20.4 to V-20.6).

MM3 sustained minor injuries (superficial laceration to right foot and lip laceration) (Tab V-22.8, and V-4.8). MM3 was not transported to hospital due to request of MP2 but was evaluated as an outpatient after the incident (Tab V-4.8, and V-22.8 to V-22.9).

Although MM4 was not assessed on scene, MP1 later indicated MM4 sustained a hand laceration (Tab V-6.8).

c. Post-Mortem

(1) Medical Examiner Report

The autopsy of MM1 was performed by a medical examiner from the Georgia Bureau of Investigation (GBI) Division of Forensic Sciences in Dry Branch, GA, on Saturday, 24 July 2024 (Tab X-4). According to the preliminary autopsy report, the medical examiner determined the cause of death to be blunt impact trauma of the head (Tab X-4).

(2) Toxicology Analysis

There are no toxicology reports to be assessed.

10. OPERATIONS AND SUPERVISION

a. Operations

The Heritage Pool is operated by ODR, a part of the 78 FSS (Tabs O-49, V-1.3, and CC-11 to CC-12). The pool is open to eligible patrons from 1230-1830L, Thursday through Monday, and is closed on Tuesday and Wednesday (Figure 10.1) (Tab DD-3). Additionally, the pool conducts swim lessons at various times on Mondays, Tuesdays, Thursdays, and Fridays (Tab DD-4). The pool is closed on Wednesdays for maintenance (Tab DD-3). The pool is open to US military, retired military, reservists, DoD civilians, family members, and sponsored guests (Tab DD-3).



Figure 10.1: 2024 Open Swim Hours (Tab DD-3)

Lifeguards are responsible for providing an enjoyable aquatic experience for patrons, enforcing pool rules, responding in an emergency, and operating the pool in a safe and sanitary manner (Tab O-4). Lifeguards rotate stations every 30 minutes and are allotted a 30-minute lunch during their shift (Tab O-9, and O-12). During adult swim, a rest period is enforced for all patrons under 18 years of age and station staffing is reduced to one lifeguard (Tab O-52).

The 2024 Heritage Pool SOP is the locally established governing guidance for pool operations, addressing multiple topics including daily opening procedures, operational checks, daily closing procedures, water testing, and EAP courses of action (Tab O-6 to O-18). Facility safety, rescue equipment, risk management, and facility and bathroom sanitation are assessed during pool opening (Tab O-6 to O-8). Lifeguard in-service training is held each Tuesday covering the EAPs, risk management, table-top exercises, and safety drills (Tab V-1.9).

EAPs are outlined in both the Outdoor Recreation Consolidated Operating Instruction (OI) and the 2024 Heritage Pool SOP (Tabs O-16 to O-18, and O-257). The OI requires clearing the pool, having a staff member stay with the victim until relieved by medical personnel, and immediately contacting 9-1-1 for serious accidents (Tab O-257). The SOP has a specific plan for land emergencies, which requires three short whistle blows, informing lifeguards to call EMS, clearing the area, providing appropriate care until EMS arrives, completing an incident report,

notifying the lead lifeguard and aquatic manager, assessing equipment used, replacing items as needed, and re-opening the facility, if it is safe to do so (Tab O-18).

On the day of the incident, the EAP was implemented to include clearing the pool, staying with the victims, and calling 9-1-1 (Tabs O-257, V-15.11, and AA-8). Major steps from the SOP not completed include: (1) blowing the whistle three times; (2) completing an incident report; (3) assessing and replacing used equipment; and (4) having a post-event staff meeting (Tabs O-18, and V-15.11).

The bathhouse is cleaned by service contract at least daily during the swimming season (Tabs O-257, and V-7.23).

b. Supervision

The supervisory structure of the Heritage Pool is as follows: lifeguards are responsible for enforcing healthy and safe pool practices and rules (Tab O-68); lead lifeguards are responsible for daily operations on the pool deck, ensuring lifeguards are at assigned stations, pool rules are enforced, and water quality checks are accomplished (Tab O-7 to O-11, and O-13); the ODR Manager oversees day-to-day operations of the pool and provides direct supervision over lifeguards and lead lifeguards (Tab O-68); and the Community Service Flight Chief, who serves as the direct supervisor of the Outdoor Recreation Manager, oversees outdoor recreation and other programs (Tab V-1.8). The 78 FSS Director supervises the Community Services Flight Chief (Tab CC-12).

11. GOVERNING DIRECTIVES AND PUBLICATIONS

a. Publicly Available Directives and Publications Relevant to the Mishap

- (1) DAFI 34-101, *Department of the Air Force Morale, Welfare, and Recreation (MWR) Programs and Use Eligibility*, 7 March 2022
- (2) AFI 32-1001, *Civil Engineer Operations*, 4 October 2019 (Corrective Action 25 October 2019)
- (3) AFI 44-177, *Public Access Defibrillator Program*, 5 June 2014 (Certified Current 22 April 2020)
- (4) AFI 51-307, *Aerospace and Ground Accident Investigations*, 18 March 2019
- (5) DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, 25 March 2022
- (6) AFMAN 48-114, *Recreational Waters and Mission Training Pools*, 23 July 2019
- (7) ROBNSAFBI 32-1001, *Facility Manager Program*, 6 October 2020
- (8) Licensed and Certified Occupations in Georgia, Workforce Statistics Division, Georgia Department of Labor, Thirteenth Edition, 2022

NOTICE: Air Force directives and publications listed above have been reduced for efficiency and are available in their entirety digitally on the Air Force Departmental Publishing Office website at: <https://www.e-publishing.af.mil>. The document from the State of Georgia Department of Labor is available digitally at <https://explorer.gdol.ga.gov/vosnet/>. Unified Facilities Criteria and the Military

Standards are available digitally on the Whole Building Design Guide website:
<https://www.wbdg.org>.

b. Other Directives and Publications Relevant to the Mishap

- (1) 2024 Heritage Pool Standard Operating Procedures
- (2) 78th Force Support Squadron Operating Instruction, *Outdoor Recreation, ITT & Arts & Crafts*, 28 February 2023; supplements DAFI 34-101, *Air Force Morale, Welfare, and Recreation (MWR) Programs and Eligibility*, 7 March 2022
- (3) Robins AFB Unit Safety Representative Guide, FY24
- (4) *Standard Building Code*, Southern Building Code Congress International, Inc. 1965

c. Known or Suspected Deviations from Directions or Publications

All known deviations previously discussed.

5 December 2024

MILLER.PATRICK.G
Digitally signed by
MILLER.PATRICK.G.
Date: 2024.12.05 20:55:39
-06'00'

PATRICK G. MILLER
Brigadier General, USAF
President, Ground Accident Investigation Board

INDEX OF TABS

Safety Investigator Information	A
Not Used	B
Not Used	C
Maintenance Reports, Records, and Data	D
Not Used	E
Not Used	F
Personnel Records.....	G
Not Used	H
Not Used	I
Not Used	J
Not Used	K
Not Used	L
Not Used	M
Transcripts of Voice Communications	N
Any Additional Substantiating Data and Reports.....	O
Damage and Injury Summaries.....	P
GAIB Transfer Documents	Q
Releasable Witness Testimony	R
Releasable Photographs, Videos, and Diagrams.....	S
Personnel Records Not Included in Tab G	T
Maintenance Records and Data Not Included in Tab D	U
Witness Testimony and Statements	V

Weather And Environment Records and Data Not Included in Tab F	W
Statements of Injury and 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
Substantiating Documents	DD
Technical Report.....	EE