

# CIL 2017-233-I-06 1st Lt Howard T. LURCOTT U.S. Army Air Forces

# Defense POW/MIA Accounting Agency Laboratory 2300 Defense Pentagon Washington, D.C. 20301-2300

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# DEFENSE POW/MIA ACCOUNTING AGENCY 2300 DEFENSE PENTAGON WASHINGTON, D.C. 20301-2300

Ser: 002-19 28 January 2019

### **MEMORANDUM**

From: DPAA Laboratory

To: U.S. Army Human Resources Command

Attn: (b)(6)

CMAOC/PCRB, Dept #450 1600 Spearhead Division Ave Fort Knox, KY 40122-5405

Subj: Identification of CIL 2017-233-I-06

Encl: (1) Case File CIL 2017-233-I-06, DPAA 2019-0003

1. Forwarded is the DPAA Laboratory case file establishing the following identification:

# First Lieutenant Howard T. LURCOTT, O-665064, U.S. Army Air Forces

- 2. Enclosed reports and documents in the DPAA Laboratory case file have been checked for accuracy and completeness and represent those documents deemed relevant and probative. One copy is for your retention, and the other is for the casualty individual's family. All presentations are marked appropriately on the inside cover of the booklet. For administrative questions, please contact (b)(6)
- 3. The identified casualty is currently at the DPAA Hickam Laboratory. Please provide this office with disposition instructions. Point of contact for the identification process is (b)(6)

(b)(6)	BERRAN.PHILIP.JO Digitally signed by BERRAN.PHILIP.JOSEPH (h)(6)  SEPH (b)(6)  Pate: 2019.01.28 12:24:51 -10'00'
(b)(6)	PHILIP J. BERRAN, M.D.

Commander, Medical Corps, U.S. Navy DPAA Medical Examiner

Defense POW/MIA Accounting Agency

Colonel, Medical Corps, U.S. Army DPAA Medical Examiner/Science Director Defense POW/MIA Accounting Agency



28 January 2019

The remains designated CIL 2017-233-I-06, DPAA 2019-0003 are identified as those of

# First Lieutenant Howard T. LURCOTT, O-665064, U.S. Army Air Forces

(b)(6)

Commander, Medical Corps, U.S. Navy DPAA Medical Examiner Defense POW/MIA Accounting Agency BERRAN.PHILIP.JO Digitally signed by BERRAN.PHILIP.JOSEPH. (h)(6)
SEPH (b)(6) Date: 2019.01.28 12:24:24-10'00'

PHILIP J. BERRAN, M.D.
Colonel, Medical Corps, U.S. Army
DPAA Medical Examiner/Science Director
Defense POW/MIA Accounting Agency

# Enclosures (9):

- Case Summary: HOWARD T. LURCOTT, First Lieutenant, U.S. Army Air Forces; signed 14 January 2019
- 2. Defense Health Agency; Armed Forces Medical Examiner System; LURCOTT, Howard T. (BTB); CIL Case No. 2017-233; AFDIL Case No. 2017H-2322; dtd 20 December 2018
- 3. Forensic Odontology Report: CIL 2017-233-I-06; dtd 7 November 2018
- 4. Forensic Anthropology Report: CIL 2017-233-I-06; dtd 2 January 2019
- 5. Biological Profile Comparison Report: CIL 2017-233-I-06; dtd 4 January 2019
- 6. Material Evidence Report: CIL 2017-233-I-06-A-01 Through A-04; dtd 26 November 2018
- 7. Relevant Personnel Records
- 8. Report of Death; Lurcott, Howard T.; dtd 5 February 1944

EOD OFFICIAL LICE ONLY

9.	DD Form 2064, Certification of Death Overseas; LURCOTT, Howard T.; dtd 28 January 2019



# DEFENSE POW/MIA ACCOUNTING AGENCY

2300 DEFENSE PENTAGON WASHINGTON, D.C. 20301-2300

# MEDICAL EXAMINER SUMMARY REPORT

DPAA Number: DPAA 2019-0003 Accession Number: CIL 2017-233-I-06

Name: LURCOTT, Howard T.

Date of Birth: 1 March 1917 Service Number: 0-665064

Rank/Service: First Lieutenant (1st Lt); U.S. Army Air Forces

Unit: 38th Bombardment Squadron (Heavy), 30th Bombardment

Group

Location of Loss: Betio Island, Tarawa Atoll, Republic of Kiribati

Date of Loss: 21 January 1944 Date of Report: 28 January 2019

# BACKGROUND

First Lieutenant (1st Lt) Howard T. LURCOTT was a U.S. Army Air Force officer/pilot assigned to the 38th Bombardment Squadron, 30th Bombardment Group, and died when his plane, B-24J no. 42-72999 crashed into the Tarawa lagoon during a bombing mission, about three miles from the end of the runway. Officials filed a Missing Air Crew Report (MACR), designating the accident MACR 2629. Nine other service members were aboard the aircraft when it crashed.

After the close of World War II, the 604th Quartermaster Graves Registration Company (GRC) recovered 532 sets of remains from Betio Island. These remains were moved to Lone Palm Cemetery on Betio Island while awaiting repatriation to the United States. In 1947, the 604th GRC returned, disinterred the remains in Lone Palm Cemetery, and transferred them to the Schofield Barracks Central Identification Laboratory (CIL) for additional analysis. However, the Schofield Barracks CIL was unable to associate any remains with 1st Lt Howard T. LURCOTT. Two additional investigations on Betio Island in 1948 and 1949 failed to uncover additional evidence relating to his case. In May 1949, a Board of Review declared 1st Lt Howard T. LURCOTT's remains "non-recoverable."

In 2009, the non-profit organization History Flight Inc. (HF) located a site on Betio Island later identified as Cemetery 33. In 2017, HF uncovered a series of coffin burials from Cemetery 33, which were subsequently accessioned by the DPAA laboratory as CIL 2017-233. While there is no firsthand account of the burial of remains from MACR 2629, records indicate that victims of another airplane crash, which occurred the same day, were interred in Cemetery 33 in wooden coffins. In fact, burials that occurred on Betio Island following December 1943 overwhelmingly took place in Cemetery 33, with the remains interred in wooden coffins. This is in stark contrast to the burial of Marines and Sailors killed during the assault on Tarawa. Due to time constraints, these individuals were typically buried in trenches, wrapped in their ponchos. Only a handful of servicemen died on Betio Island following the battle, of which ten remain unidentified, so the number of potential coffin burials is small. The recovery of coffin burials in Cemetery 33

indicates that these remains are associated with a post-December 1943 loss. Therefore, there is a strong possibility of an association between CIL 2017-233 and 1st Lt Howard T. LURCOTT.

# SUMMARY OF IDENTIFICATION

# **DNA** Analysis:

DNA testing is performed at the Armed Forces DNA Identification Laboratory (AFDIL), Armed Forces Medical Examiner System, Dover AFB, DE. Tests include mitochondrial DNA (mtDNA), which traces the maternal (mother's) line.

The right humerus, left metacarpal 5, and right clavicle were tested for mtDNA. The mtDNA sequence obtained from the specimens was compared to all completed family reference samples associated with this World War II incident in the Armed Forces DNA Identification Laboratory Family Reference Database. The sequence obtained from the specimens was consistent with maternal references (b)(6) associated with only one missing service members from this incident, 1st Lt LURCOTT.

The genetic data (mtDNA) are approximately 1,200 times more likely to be observed under the scenario that the elements tested originated from a maternal relative of 1st Lt LURCOTT's (b)(6) and (b)(6) as opposed to originating from an unrelated individual from the Caucasian population.

# Dental Analysis:

The dental remains consist of an attached maxillae (top jaw) and a complete mandible (bottom jaw) with 17 articulated teeth, the articulated root of tooth #12, and an unspecified crown fragment. Six teeth were lost during the perimortem or postmortem period, as evidenced by open and unhealed tooth sockets. Eight teeth were missing before death (antemortem missing), as demonstrated by healed bone in those areas.

The Centralized Accounting Repository and Information System (CARIS) is a computer program that compares the dental characteristics of the remains to the available records of individuals lost in the incident; the product of this comparison is a list of possible candidates. The comparison of the remains to the CARIS dental database resulted in 1st Lt LURCOTT receiving the most matches and ranked him as the top candidate for identification.

The examined remains correspond to the antemortem evidence of 1st Lt LURCOTT with no unexplainable discrepancies. Based upon the correlations (including explainable discrepancies) between the antemortem and postmortem dental evidence, the dental remains are probably those of 1st Lt Howard T. LURCOTT.

LURCOTT, Howard T. DPAA 2019-0003; CIL 2017-233-I-06

# Anthropology Analysis:

The examined remains consist of a mostly complete and fragmented skeleton in fair condition. Dentition and portions of hand or toe nails are present. Small nondiagnostic osseous fragments mixed with sediment are associated with the remains. Probable desiccated brain tissue is present inside the cranium. The remains are consolidated from two sources, both ultimately associated with Cemetery 33 on Betio Island, Tarawa Atoll, Republic of Kiribati: remains originally designated CIL 2017-011 were disinterred from the National Memorial Cemetery of the Pacific (NMCP) on 23 January 2017; remains originally designated CIL 2017-233 were received from History Flight Inc. on 25 July 2017. These remains represent a single individual as the skeleton displays good bilateral symmetry and overall consistency in size, robusticity, and age markers throughout. Extant articulations fit well and there is no duplication of elements. Blunt force perimortem trauma is apparent in several regions of the skeleton. The remains represent a European male individual aged 22–28 years at the time of death with a living stature estimated to be between 66.3 and 71.7 inches. On the date of loss, 1st Lt Howard T. LURCOTT was a 26-year-old White male, who stood 69 inches tall.

# Material Evidence Analysis:

The material evidence was received as unilateral turnover from the DPAA partner, History Flight Inc. The evidentiary materials were reportedly recovered in direct association with the osseous remains (CIL 2017-233-I-06) during the excavation of a site believed to be Cemetery 33 on Betio Island, Tarawa Atoll, Republic of Kiribati. The material evidence consists of a sledge hammer head, a belt buckle and clip end, and several buttons. The belt buckle, clip end, and buttons are consistent with materials issued to, or used by, U.S. military personnel during World War II.

# **OPINION**

The laboratory analysis and the totality of the circumstantial evidence available establish the remains as those of 1st Lt Howard T. LURCOTT, O-665064, U.S. Army Air Forces.

The date of 1st Lt LURCOTT's death was previously established by the U.S. Army as 21 January 1944, with the cause of death stated as "Killed in Action." Based on the available evidence, the cause of death is best certified as "Multiple Injuries." Based on the historical record the manner of death is certified as "Accident." The date of death is consistent with available historical records. If additional remains of 1st Lt LURCOTT are recovered and identified, disposition of those remains will be in accordance with the wishes of the next of kin.

(b)(6)

Commander, Medical Corps, U.S. Navy DPAA Medical Examiner Defense POW/MIA Accounting Agency BERRAN.PHILIP.JO

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Date: 2019.01.28.12:24:01-10'00'

PHILIP J. BERRAN, M.D.
Colonel, Medical Corps, U.S. Army
DPAA Medical Examiner/Science Director
Defense POW/MIA Accounting Agency





# **HOWARD T. LURCOTT**First Lieutenant, U.S. Army Air Forces

**PERSONAL INFORMATION:** First Lieutenant (1st Lt) Howard T. LURCOTT, service number O-665064, was born on 1 March 1917. He enlisted in the U.S. Army Air Forces in Philadelphia, Pennsylvania, on 4 February 1942, and was eventually assigned to the 38th Bombardment Squadron, 30th Bombardment Group, United States Army Air Forces. As a member of the squadron, 1st Lt LURCOTT served as the pilot of a B-24J, no. 42-72999. First Lieutenant LURCOTT was killed on 21 January 1944 when his plane crashed during a combat mission off of Betio Island, Tarawa Atoll, Gilbert Islands (now part of the Republic of Kiribati). <sup>1</sup>

Crew of B-24J no. 42-72999								
Name	Service Number	Rank	Branch of Service	Date of Loss	Status			
LURCOTT, Howard T.	O-665064	1st Lt	USAAF	21 January 1944	KIA-BNR*			
Johnson, George M.	O-534947	2d Lt	USAAF	21 January 1944	KIA-BNR			
Alenier, Stanley J.	O-801180	2d Lt	USAAF	21 January 1944	KIA-BNR			
Dabrowski, Stephen J.	O-669210	2d Lt	USAAF	21 January 1944	Recovered			
Myers, Arthur E.	35038018	S Sgt	USAAF	21 January 1944	Recovered			
Fenzel, John F.	33064378	S Sgt	USAAF	21 January 1944	KIA-BNR			
Polzien, Donald L.	17038352	S Sgt	USAAF	21 January 1944	KIA-BNR			
Shell, James W.	14047616	S Sgt	USAAF	21 January 1944	KIA-BNR			
Shaffer, Carl M.	33186567	S Sgt	USAAF	21 January 1944	KIA-BNR			
Rothman, Howard	32075843	Sgt	USAAF	21 January 1944	KIA-BNR			

<sup>\*</sup>KIA-BNR: Killed in Action-Body not Recovered

**CIRCUMSTANCES OF LOSS:** In the autumn of 1943, the U.S. Navy Pacific Fleet set its sights on the Gilbert Islands. The Gilberts offered the Pacific Fleet a platform from which to launch air assaults on the Marshall and Caroline Islands. Ultimately these islands would serve as

<sup>±</sup> The historical background and investigations sections were compiled, unless otherwise noted, from information owned and published by the Department of Defense.

<sup>&</sup>lt;sup>1</sup> All the documentation in First Lieutenant (1st Lt) LURCOTT's files indicates that he was a member of the 38th Bombardment Squadron. However, squadron records indicate that he was originally a member of the 819th Bombardment Squadron, and was only attached to the 38th Bombardment Squadron in January 1944, shortly before his death. "Data on Remains Not Yet Recovered," in Individual Deceased Personnel File (IDPF) for LURCOTT, Howard T., 1st Lt, O-665064, Record Group (RG) 92: Records of the Quartermaster General, National Personnel Records Center (NPRC), St. Louis, MO; Army Enlistment Record for Howard T. LURCOTT, O-665064, on Fold3.com; "Organization History, 38th Bombardment Squadron (H), 30th Bombardment Group (H), VII Bomber Command, Seventh Air Force, 1 January 1944-21 January 1944," Air Forces Unit Histories, Air Force Historical Research Agency, Maxwell AFB, AL.

stepping stones and provide U.S. forces with key bases increasingly closer to the Japanese islands. The Gilbert Islands were a crucial first step.

The key to the American seizure of the Gilbert Islands was the capture of Betio Island, a small island located within Tarawa Atoll with a key Japanese airstrip and sizable Japanese garrison. Between 20 and 23 November 1943, Marines from the 2nd Marine Division (2nd MARDIV) hurled themselves against strongly entrenched Japanese forces on Betio Island. By the end of 23 November 1943, American forces controlled the atoll. In total, the 2nd MARDIV suffered 1,020 dead, and more than 2,000 wounded.<sup>2</sup> On 24 November 1943, the majority of the 2nd MARDIV withdrew from Betio Island. Only the chaplains and a defense garrison, including a series of U.S. Navy Construction Battalion ("Seabee") units, remained on the island to bury the dead and repair and operate the airfield.<sup>3</sup>



Figure 1. The crew of B24-J, no. 42-72999, "Galloping Gus." From left to right, standing: Staff Sergeant (S Sgt) Shaffer, Second Lieutenant (2d Lt) Alenier, 2d Lt Johnson, 1st Lt LURCOTT, and 2d Lt Dabrowski. Left to right, kneeling: S Sgt Shell, Sergeant (Sgt) Rothman, S Sgt Fenzel, and S Sgt Myers.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> This number includes Navy medical personnel assigned to Marine units. The number of killed in action comes from DPAA research, which is ongoing. The number of wounded in action comes from statistics provided by Colonel Joseph H. Alexander. Joseph H. Alexander, *Across the Reef: The Marine Assault of Tarawa*, Marines in World War II Commemorative Series, (Washington, D.C.: Marine Corps Historical Center, 1993), 50.

<sup>&</sup>lt;sup>3</sup> James R. Stockman, *The Battle for Tarawa*, USMC Historical Monograph (Washington, D.C.: Marine Corps Historical Center, 1947), 65.

<sup>&</sup>lt;sup>4</sup> "Organization History, 38th Bombardment Squadron," Maxwell AFB.

Almost as soon as the Marines secured the airstrip on Betio Island, American planes began to land.<sup>5</sup> For the duration of the war, American forces used the airstrip, christened Hawkins Field, as a base for bombing missions across the Pacific Theatre. Members of the 38th Bombardment Squadron arrived on Betio Island in early January 1944, and immediately began bombing runs on Kwajalein Atoll and other nearby targets. First Lieutenant LURCOTT and the nine other members of his crew, originally members of the 819th Bombardment Squadron, were attached to the 38th Bombardment Squadron on 13 January 1944, and it is likely they arrived on Betio Island around that date (see Figure 1).<sup>6</sup>

At 1238 GCT on 21 January 1944, 1st Lt LURCOTT's plane took off from Betio Island on a bombing run to Roi-Namur Island, Kwajalein Atoll. The aircraft climbed to 250-300 feet, but the engines "did not sound as though they were developing power." Officials later stated they believed this was due to water in the gas. The plane stalled and crashed into Tarawa lagoon approximately three miles east of the end of the runway (Figure 2). All ten men in the plane, including 1st Lt LURCOTT, died as a result of the crash.

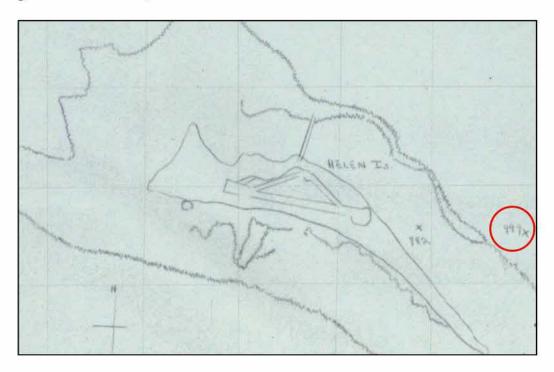


Figure 2. This map of Betio Island was included in the Missing Air Crew Report submitted shortly after 1st Lt LURCOTT's plane crashed. Helen was the code name for Betio Island. The location of the crash (circled in red) is indicated by the "x" on the right of the map marked "999."

<sup>&</sup>lt;sup>5</sup> Joseph H. Alexander, Utmost Savagery: the Three Days of Tarawa (Annapolis: Naval Institute Press, 1995), 205.

<sup>&</sup>lt;sup>6</sup> "Organization History, 38th Bombardment Squadron," Maxwell AFB.

<sup>&</sup>lt;sup>7</sup> Individual Deceased Personnel File for Shaffer, Carl M., Staff Sergeant (S Sgt), 33186567.

Rescue crews quickly reached the scene and reportedly recovered the remains of five individuals. Three sets of remains were identified: 1st Lt LURCOTT, 2d Lt Stephen J. Dabrowski, and S Sgt Arthur E. Myers. The other two sets of remains were not identifiable. All five sets of remains were interred in the Main Marine Cemetery on Betio Island on 22 January 1944. The squadron left the island the following day. Shortly after the accident, officials filed a Missing Air Crew Report (MACR) regarding the crash. The incident was designated MACR 2629. The incident was designated MACR 2629.

HISTORIC SEARCH AND RECOVERY: Over the next few years, Seabee units modified the appearance and organization of the isolated graves and cemeteries on Betio Island as part of larger construction projects. Some cemeteries were lost, others moved. The Seabees also beautified the new cemeteries: they erected memorial markers in the center of several of the larger cemeteries, and each grave received a white cross. There were two problems with this decision. The first was that when the Seabees shifted the cemetery markers to accommodate the new construction, they did not shift the graves. As a result, the crosses no longer corresponded with the original grave site. The second problem was that, in trying to memorialize the fallen, the Seabees memorialized everyone. Marines whose remains had not been recovered, who were buried at sea, or who were buried elsewhere on the island, were often given a memorial cross in one of the larger cemeteries. As a result, the names on the crosses no longer corresponded with the names of those originally believed to be buried in the cemetery. The Seabee's beautification efforts included the Main Marine Cemetery, now renamed Cemetery 33, which the Seabees rotated and expanded significantly. When the Seabees were done, instead of 153 graves (the original number of individuals believed to be buried in the cemetery), there were almost

<sup>&</sup>lt;sup>8</sup> Rescue operations were likely led by a team of six divers from the 74th Naval Construction Battalion. *74th Battalion in Review, 1943-1944*, pg. 27, accessed 12/17/2018. https://www.history.navy.mil/content/history/museums/seabee/explore/wwii-cruisebooks.html

<sup>&</sup>lt;sup>9</sup> "Plot 13, Main Marine Cemetery," 4 March 1948, in IDPF for Rogers, Vincent J., Jr., S Sgt, 12169863.

There is contradictory information regarding the date of burial. A letter from Mr. and Mrs. Lurcott to Colonel James Clearwater indicates that a friend of 1st Lt LURCOTT contacted the family and stated he attended 1st Lt LURCOTT's funeral on Betio Island. The friend did not state when the funeral occurred, but the squadron did not return to Betio Island until 22 January. The squadron commander and medical officer both testified that the funerals took place on that date. However, a "Report of Interment" for 1st Lt LURCOTT indicates that he was buried at 1530 on 21 January 1944. The accuracy of the "Report of Interment" is suspect. The burial location on the card gives 1st Lt LURCOTT's grave location in the memorial version of Cemetery 33, not in the original cemetery. The report itself was not completed until 8 November 1944, nearly ten months after the accident. Captain Victor Sharrett, who signed the "Report of Interment," later admitted that he was not on island at the time of the accident, but instead arrived some time later. The "Reports of Interment" were presented to him for his signature at that time, and forwarded to headquarters. Mr. and Mrs. Alfred Lurcott to Colonel James B. Clearwater, 18 September 1950; Joseph F. Vogl, "Report of Official Travel: San Francisco, California," 17 May 1950; Joseph F. Vogl, "Report of Official Travel: Pendleton, Oregon," 18 May 1950; "Report of Interment" 8 November 1944; Colonel E. Busch to Commanding General, U.S. Army, Pacific, "Plot 13, Main Marine Cemetery, Betio Island Tarawa Atoll," 4 March 1949 in IDPF for LURCOTT.

<sup>&</sup>lt;sup>11</sup> "Accident of Airplane B-24J, No. 42-72999," 23 January 1944; Joseph F. Vogl, "Report of Official Travel," 16 May 1950; Louis J. Lamm, "Missing Air Crew Report," 18 February 1944, in IDPF for LURCOTT.

400 white crosses in Cemetery 33, including one for 1st Lt LURCOTT in Plot 13, Row 3, Grave 2.12

After the end of the war, the United States began the task of repatriating its fallen. Recovery of the dead from Betio Island fell to an Army detachment from the 604th Quartermaster Graves Registration Company (604th GRC). On 4 March 1946, the detachment arrived on Betio Island and began recovery operations. <sup>13</sup>

Almost immediately it became clear that the neat, precise memorial cemeteries did not reflect the actual burial locations on Betio Island. It took the 604th GRC several days just to locate the original burial trenches for Cemetery 33, which they eventually discovered at a diagonal to the white crosses erected by the Seabees in 1944 (see Figure 3). The 604th GRC recovered five sets of remains which they associated with MACR 2629, including the remains of 2d Lt Dabrowski and S Sgt Myers, but they could not identify those of 1st Lt LURCOTT.

The 604th GRC's struggles to locate Cemetery 33 and 1st Lt LURCOTT's remains became emblematic of problems the 604th GRC encountered locating and identifying remains on Betio Island. Over the next two months, the 604th GRC recovered just 122 sets of remains from Cemetery 33, less than the 153 individuals originally believed to be buried in the cemetery. Moreover, they only recovered 532 sets of remains from the island as a whole. This left the remains of almost 500 Marines, Sailors, and Airmen unaccounted for. Then, as they began to process the remains, officials discovered that almost none possessed any form of identification media. In those few cases that did have dog tags, the metal was often corroded and completely illegible. Officials worked to identify these remains using other methods, but, as with the remains associated with MACR 2629, they were often unsuccessful. As a result of these difficulties, the 604th GRC could only identify a little more than 300 sets of remains. All remaining unidentified remains were examined, photographed, and assigned an "X" number designation.

Edward Steere and Thayer Boardman, Final Disposition of WWII Dead, 1945-1951 (Washington, D.C.: Historical Branch, Office of the Quartermaster General, 1957), 398; Graves Registration Section, Service & Supply Company, "Recapitulation of Known Graves," 3 February 1944, RG 127, National Archives and Records Administration (NARA), College Park, MD; "Plot 13, Grave 33 Cemetery Betio Is. --- Tarawa Gilbert Is.," in IDPF for La Sota, Thomas E., S Sgt, 37308941, NPRC; First Lieutenant Eisensmith, Memorandum to Chief, Memorial Branch, Quartermaster Section, Army Forces, Middle Pacific, 3 July 1946, General Correspondence, Miscellaneous File, RG 92, NARA, College Park, MD.

<sup>&</sup>lt;sup>13</sup> Steere and Boardman, Final Disposition of WWII Dead, 398.

<sup>&</sup>lt;sup>14</sup> This number includes servicemen killed on the island after the battle. Steere and Boardman, *Final Disposition of WWII Dead*, 402.

<sup>&</sup>lt;sup>15</sup> Specifically, 1st Lt Eisensmith stated that only 58% of recovered remains were identified. "Recapitulation of Known Graves," 3 February 1944, NARA; First Lieutenant Eisensmith to Memorial Branch, 3 July 1946, RG 92, NARA.



Figure 3. This photograph was taken by the 604th GRC during its work in Cemetery 33 in March 1946. The trench in the foreground is the original burial trench constructed by the Marines in November 1943. The Seabees' white crosses clearly do not align with the trench.<sup>16</sup>

In an effort to consolidate the remains they had recovered, the 604th GRC moved all American remains found on Betio Island to a single central location named Lone Palm Cemetery. Having completed Lone Palm Cemetery, the 604th GRC concluded their initial phase of operations on Betio Island on 20 May 1946. The 604th GRC then returned to Betio Island in 1947 and disinterred all the remains from Lone Palm Cemetery for repatriation. All identified remains were sent to a cemetery chosen by the next of kin for final burial. Those remains that were still unidentified were sent to the Schofield Barracks Central Identification Laboratory (CIL), at Schofield Barracks, Territory of Hawaii, for further analysis. This resulted in dozens of new identifications, bringing the total of identified remains to more than 400, but the Schofield Barracks CIL could not associate any of the remains with 1st Lt LURCOTT. Over the course of

<sup>&</sup>lt;sup>16</sup> First Lieutenant Eisensmith to Memorial Branch, 3 July 1946, RG 92, NARA.

1949, the CIL interred ninety four sets of unidentified Tarawa remains in the National Memorial Cemetery of the Pacific (NMCP) in Honolulu.

As the CIL continued its work, the 604th GRC returned to Betio Island in February 1948 to search for additional information and remains related to MACR 2629. The team investigated the location of Cemetery 33, but failed to uncover additional remains or evidence associated with the crash. A second team returned to Betio Island in March 1949, this time to investigate a plane wreck in Tarawa lagoon which they believed was the wreck of MACR 2629. Despite limited visibility underwater, officials determined that the plane had broken into several large pieces and that the body of the plane had suffered serious damage. As a result, they concluded it was unlikely there were any remains in the wreckage. The search team also investigated a site believed to be associated with Cemetery 33, but were unable to recover anything. Based on their findings, officials argued that it was most likely that 1st Lt LURCOTT's remains were either too fragmentary to recover from the plane, or they were interred in Cemetery 33 shortly after the crash and were likewise too fragmentary to recover. Shortly after the team returned from Betio Island, Boards of Review met to review the cases of those missing throughout the Pacific. On 27 May 1949, a Field Board of Review designated 1st Lt LURCOTT's remains "non-recoverable."

**RECENT RESEARCH AND FIELDWORK:** The 604th GRC concluded its investigation into losses on Tarawa Atoll in 1949. Over the next sixty years, storms and construction projects on Betio Island continued to uncover isolated remains associated with Americans killed during World War II. These remains were turned over the U.S. government. None were associated with Cemetery 33 or 1st Lt LURCOTT.

In 2009, members of the non-profit organization History Flight Inc. (HF) conducted geospatial surveys of Betio Island in an attempt to identify the location of cemeteries and isolated graves from the Battle of Tarawa. This work, along with archival research, prompted HF to identify a site on the southern coast of Betio Island as Cemetery 33. Since 2009, the site has been the focus of numerous excavations by both the Defense POW/MIA Accounting Agency (DPAA) and HF, now a partner of DPAA.<sup>22</sup>

<sup>&</sup>lt;sup>17</sup> Clarence C. Hawkins to Commanding Officer, Hq American Graves Registration Service, "1st Ind.," 5 February 1948; "Report of Investigation of AGRS Case #605," 4 February 1948, in IDPF for LURCOTT.

<sup>&</sup>lt;sup>18</sup> The belief that this was a B-24J plane was based on witness accounts, which stated the wreck, in about thirty feet of water, had a wing section with two engines on either side. Local witnesses also stated that this plane had crashed during late January 1944 in the middle of the night. All this was consistent with the crash of 1st Lt LURCOTT's plane. "Hqs, Search and Recovery Expedition #2, APO 958," 25 April 1949, in IDPF for LURCOTT.

<sup>&</sup>lt;sup>19</sup> "Report of Investigation of AGRS Case #605," 4 February 1948, in IDPF for LURCOTT.

<sup>&</sup>lt;sup>20</sup> "Brief History," 20 October 1949; "Proceedings of Board of Review," in IDPF for LURCOTT.

<sup>&</sup>lt;sup>21</sup> "Proceedings of Board of Review," 27 May 1949, in IDPF for LURCOTT.

<sup>&</sup>lt;sup>22</sup> In January 2015, three elements of the Accounting Community – the Joint POW/MIA Accounting Command (JPAC), Defense POW/Missing Personnel Office (DPMO), and Life Science Equipment Laboratory (LSEL) –

In 2010, DPAA launched an initiative to investigate all Tarawa losses. As part of these efforts, in January 2016, agency historians and scientists proposed the disinterment of the 94 Tarawa unknowns buried in the NMCP.<sup>23</sup> In October 2016, DPAA received authorization to disinter and examine all of the unknowns. On 23 January 2017, DPAA disinterred "Tarawa Unknown X-15" from Section E, Grave 739, accessioning the remains as CIL 2017-011.<sup>24</sup> That same year, members of HF uncovered a series of coffin burials in Cemetery 33 (see Figure 4). Members of DPAA escorted the remains back to DPAA facilities in Hawaii, where anthropologists and scientists associated one of the coffin burials with X-15 through scientific analysis. The remains were consolidated and accessioned as CIL 2017-233.

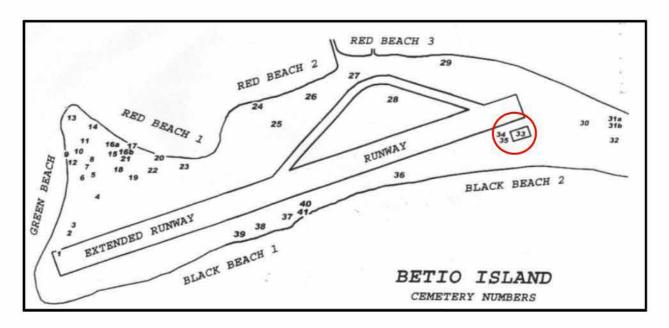


Figure 4. Map of reported burial areas on Betio Island. Cemetery 33 is highlighted in red.<sup>25</sup>

There is strong historical evidence that CIL 2017-233 could be associated with 1st Lt LURCOTT. Burials on Betio Island after the middle of December 1943 overwhelmingly took place in Cemetery 33, with the remains interred in wooden coffins. In fact, records indicate that victims of another airplane crash which occurred the same day as MACR 2629 were interred in Cemetery 33 in wooden coffins. These burials differ significantly from the burials of

combined to become one agency, the Defense POW/MIA Accounting Agency (DPAA). These predecessor organizations are referred to as DPAA throughout this report.

<sup>&</sup>lt;sup>23</sup> "Memorandum for Record, Subj: Disinterment Request for the Tarawa Unknowns," 5 January 2016, Defense POW/MIA Accounting Agency (DPAA) Case Files, Joint Base Pearl Harbor-Hickam (JBPHH), Hawaii.

<sup>&</sup>lt;sup>24</sup> "Disinterment Directive," 23 March 1949, X-15 Schofield Mausoleum #1.

<sup>&</sup>lt;sup>25</sup> "Location of Graves on Betio Island Tarawa Atoll," RG 80: General Records of the Department of the Navy, 1798-1947, NARA, College Park, MD.

<sup>&</sup>lt;sup>26</sup> Vogl to Chief of the Memorial Division, "Report of Official Travel," 18 May 1950, in IDPF for LURCOTT.

Marines killed during the assault on Tarawa. Due to a lack of resources and time constraints, Marines were typically buried in trenches, wrapped in their ponchos. Only a handful of servicemen died on Betio Island following the battle, so the number of individuals who potentially received coffin burials is small. The recovery of a coffin burial in Cemetery 33 indicates that CIL 2017-233 is associated with a post-December 1943 loss. First-hand accounts of 1st Lt LURCOTT's burial are vague, and the records placing him in Cemetery 33 were completed months after his death. Based on the timing of his death, however, it is likely that officials buried 1st Lt LURCOTT in a wooden coffin in Cemetery 33, possibly linking him with CIL 2017-233.

The circumstances surrounding the recovery of X-15 in 1946 also suggest a possible association between CIL 2017-233 and 1st Lt LURCOTT. During the 604th GRC's examination of the remains in March 1946, officials compared X-15's dentition to that of 1st Lt LURCOTT and Technical Sergeant (T Sgt) Edward A. Horney. Technical Sergeant Horney was killed in a second airplane crash in Tarawa lagoon (MACR 2818), which occurred seventeen minutes before 1st Lt LURCOTT's. His remains, and those of the other crew members killed in the crash, were also buried in Cemetery 33, likely on the same day as MACR 2629.<sup>27</sup>

The historical record does not indicate why officials decided to compare X-15 against these two individuals. Historically, however, AGRS officials typically compared unknowns against the records of those reportedly buried adjacent to the unknown. Both 1st Lt LURCOTT and T Sgt Horney were reportedly interred in Cemetery 33, in Plot 13, Row 3, in adjacent graves (see Figure 5). The choice to compare X-15 against these two individuals suggests that X-15 may have been recovered from Row 3, Plot 13, indicating that X-15 was likely an air loss from MACR 2818 or MACR 2629.

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<sup>&</sup>lt;sup>27</sup> IDPF for Horney, Edward A., Technical Sergeant (T Sgt), 33236164; Joseph F. Vogl, "Report of Official Travel," 18 May 1950; "Report of Interment," in IDPF for Rogers.

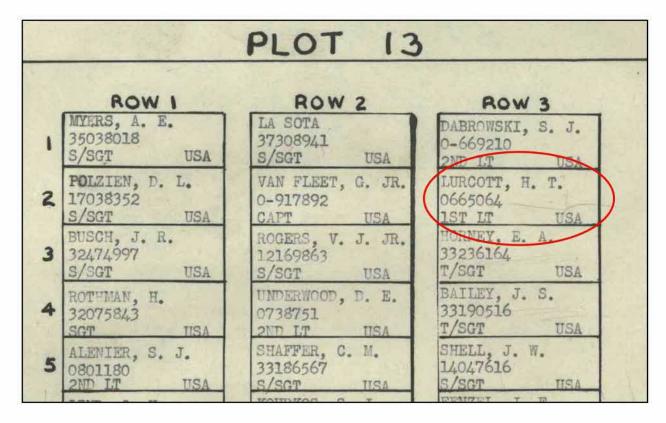


Figure 5. Map of Plot 13, Cemetery 33. The map was completed after the Seabees memorialized the cemetery, but subsequent investigations by the DPAA and HF that the general layout of the graves is accurate, even if the grave markers did not match the location of individual graves. The location of 1st Lt LURCOTT's grave is circled.<sup>28</sup>

More concrete evidence emerges from the CIL's examination of X-15 in 1949: a pair of G.I. shoes, U.S. Army type.<sup>29</sup> Only seventeen members of the U.S. Army were reportedly buried on Betio Island. All of them were members of the U.S. Army Air Forces who died on 21 January 1944 as a result of plane crashes: the crews of MACR 2818 and MACR 2629. While none of the evidence points specifically to 1st Lt LURCOTT, the historical evidence overwhelmingly indicates that CIL 2017-233 is associated with the seventeen U.S. Army Air Force losses from 21 January 1944 buried in Cemetery 33.

**ANALYTICAL SUMMARY:** First Lieutenant Howard T. LURCOTT, a member of the 38th Bombardment Squadron, 30th Bombardment Group, died on 21 January 1944 when his plane, B-24J no. 42-72999, crashed into Tarawa lagoon during a bombing mission, about three miles from the end of the runway. His remains were recovered and buried in Cemetery 33. Officials filed a Missing Air Crew Report, designating the accident MACR 2629.

After the close of World War II, the 604th GRC recovered 532 sets of remains from Betio Island. These remains were moved to Lone Palm Cemetery on Betio Island while awaiting

<sup>&</sup>lt;sup>28</sup> "Plot 13, Grave 33 Cemetery Betio Is. --- Tarawa Gilbert Is.," in IDPF for Thomas E. La Sota, SSgt, 37308941.

<sup>&</sup>lt;sup>29</sup> "Identification Data," X-15, Schofield Mausoleum #1.

repatriation to the United States. In 1947, the 604th GRC returned, disinterred the remains in Lone Palm Cemetery, and transferred them to the Schofield Barracks CIL for additional analysis. However, the Schofield Barracks CIL was unable to associate any remains with 1st Lt LURCOTT. Two additional investigations on Betio Island in 1948 and 1949 failed to uncover additional evidence relating to his case. In May 1949, a Board of Review declared 1st Lt LURCOTT's remains "non-recoverable."

In 2009, the non-profit organization History Flight located a site on Betio Island later identified as Cemetery 33. This launched an investigation of all Tarawa losses by DPAA. As part of the project, DPAA disinterred ninety four unknowns from NMCP beginning in 2016. In 2017, HF uncovered a series of coffin burials in Cemetery 33. Based on anthropological analysis, the DPAA laboratory consolidated one of the coffin burials with Tarawa Unknown X-15. The consolidated remains were accessioned as CIL 2017-233. Based on the recovery of a coffin burial in Cemetery 33, the presence of material evidence associated with X-15, and what can be inferred about X-15's burial location, it is historically feasible that CIL 2017-233 could be associated with First Lieutenant Howard T. LURCOTT.

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# FORENSIC ODONTOLOGY REPORT: CIL 2017-233-I-06

# DPAA LABORATORY

7 November 2018

# **DENTAL REMAINS**

The dental remains of CIL 2017-233-I-06 consist of an attached maxillae (top jaw) and a complete mandible. The dental characteristics include: articulated teeth #1, #2, #5, #6, #8-#11, #15, #18-#21, #23, #24, #28, and #32; articulated root of tooth #12; healed bone in the areas previously occupied by teeth #3, #4, #13, #14, #16, #17, #30, and #31 indicate they were lost prior to death (antemortem missing); open and unhealed sockets for teeth #7, #22, #25-#27, and #29 would suggest they were lost around the time of or after death (perimortem/postmortem missing); and an unspecified crown fragment. The dental remains present with brown staining on the crowns of multiple teeth and are in a poor state of preservation. Tooth #9 was submitted for DNA analysis, did not yield a conclusive sequence, and was reconstructed. Photographs (Figures 1 through 5) and radiographs were taken.

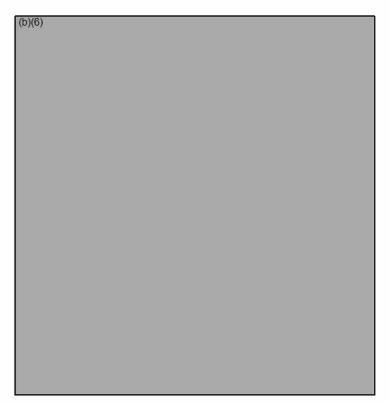


Figure 1. CIL 2017-233-I-06, anterior view of the maxillae and mandible (top to bottom, respectively).

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Forensic Odontology Report: CIL 2017-233-I-06

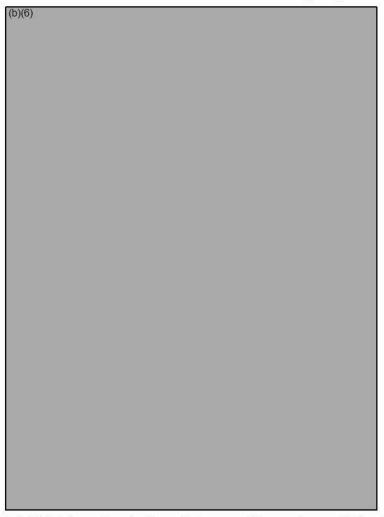


Figure 2. CIL 2017-233-I-06, occlusal view of the maxillae and mandible (top to bottom, respectively).



Figure 3. CIL 2017-233-I-06, lateral view of the right and left sides of the maxillae (left to right, respectively).

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Forensic Odontology Report: CIL 2017-233-I-06



Figure 4. CIL 2017-233-I-06, lateral view of the right and left mandible (left to right, respectively).



Figure 5. CIL 2017-233-I-06, crown fragment.

# ANTEMORTEM DENTAL INFORMATION

This incident involves a WWII loss. The available antemortem dental evidence for the associated casualty, First Lieutenant (1st Lt) Howard T. LURCOTT, consists of:

- 1. Form 79 (REPORT OF DENTAL SURVEY) labeled *Lurcott, Howard T* which is dated *AUG 7 1942*, signed by the dental officer who performed the examination, and with treatment entries dated *9/14/42* through *9/26/42*.
- 2. Form 79 (REPORT OF DENTAL SURVEY) labeled *Lurcott*, *Howard T* which is dated *FEB 19 1942*, signed by the dental officer who performed the examination, and with a treatment entry date of 2/19/42.
- 3. Form 79 (REPORT OF DENTAL SURVEY) labeled *Lurcott, Howard T*. which is dated *Feb. 9, 1942*, signed by the dental officer who performed the examination, and with treatment entries dated 2-9-42 through 2-13-42.

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Forensic Odontology Report: CIL 2017-233-I-06

- 4. The treatment entry side of Form 79 (REPORT OF DENTAL SURVEY) labeled *Lurcott Howard T.*, with a treatment entry dated *Mar. 13*, and signed by the Dental Corps officer who performed the treatment.
- OQMG FORM 371 (DATA ON REMAINS NOT YET RECOVERED OR IDENTIFIED) labeled LURCOTT, HOWARD T. with an undated dental chart.
- 6. OQMG FORM 371 (DATA ON REMAINS NOT YET RECOVERED OR IDENTIFIED) labeled *Lurcott*, *Howard T*. with an undated dental chart.
- 7. OQMG FORM 371 (DATA ON REMAINS NOT YET RECOVERED OR IDENTIFIED) labeled *LURCOTT*, *HOWARd T*. with an undated dental chart. The words *PHOTOSTATS ATTACHEd* are hand-written in the upper right and left quadrants of the chart.
- 8. AGRAC FORM I-380 (IDENTIFICATION SECTION MEMORIAL DIVISION IDENTIFICATION DATA) labeled *Lurcott*, *Howard T* with an undated dental chart. Administrative stamps are present on the reverse side.
- 9. A dental chart with no name or date.

# COMPARISON

The dental remains correspond to the antemortem evidence of 1st Lt LURCOTT with no unexplainable discrepancies (Table 1). Points of concordance include restored teeth #2, #6, #9, #11, and #15; antemortem missing teeth #3, #13, #14, #16, #30, and #31; and unrestored teeth #8, #10, #20, #23, and #24.

Tooth #	Tooth #	CIL 2017-233-I-06	1st Lt LURCOTT		
1	R-8	O-S	V		
2	R-7	O-S	O-S		
3	R-6	X	X		
4	R-5	X	F-S		
5	R-4	MOL-S, F-S	X		
6	R-3	F-N	F-N		
7	R-2	E	V		
8	R-1	V	V		
9 L-1		D-N	D-N		
10	L-2	V	V		
11	L-3	F-N	F-N		
12	L-4	Root only, remnants of F-N	F-S		
13	L-5	X	X		
14	L-6	X	X		
15	L-7	O-S, O-S	O-S, O-S		
16	L-8	X	X		
17	L-16	X	V		
18	L-15	O-S	V		
19	L-14	MODF-S, R	Restored		
20	L-13	V	V		

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Forensic Odontology Report: CIL 2017-233-I-06

Tooth #	Tooth #	CIL 2017-233-I-06	1st Lt LURCOTT
21	L-12	F-N	V
22	L-11	Е	V
23	L-10	V	V
24	L-9	V	V
25	R-9	Е	V
26	R-10	Е	V
27	R-11	E	V
28	R-12	F-N	V
29	R-13	Е	D-S
30	R-14	X	X
31	R-15	X	X
32	R-16	O-S	F-S

KEY: Tooth # left column = Universal system (current); tooth # right column = WWII era numbering system; green shade = similar finding; yellow shade = explainable discrepancy; V = unrestored; M = mesial; O = occlusal; D = distal; L = lingual; F = facial; S = silver amalgam restoration; N = non-metal restoration; R = root canal therapy; E = perimortem/postmortem missing or indeterminate status; X= antemortem missing.

There are three types of explainable discrepancies noted in the antemortem/postmortem dental record comparison. The first type involves status of teeth #1, #12, #17-#19, #21, and #28. These differences may be explained by the completion of treatment (i.e., tooth removal, restorative care, and root canal therapy) subsequent to the last dental examination or charting, for which documentation is not available for review.

The second type of explainable discrepancy involves the status of teeth #4 and #5 (upper right second and first premolars, respectively). First Lieutenant LURCOTT's dental profile documents the presence of tooth #4 and the absence of tooth #5. In contrast, the extraction pattern is reversed in the remains. The appearance of both types of premolars (first and second premolars) are similar and are easily mistaken for the other. This charting discrepancy may possibly be explained by differing opinions of the dentist who charted 1st Lt LURCOTT's most current dental record and the author of this report regarding the specific teeth present and missing. The subsequent and undocumented restorative care of the premolar may assist in completing the explanation of this discrepancy.

The third type of explainable discrepancy involves the restorative status of tooth #32. This difference may possibly be explained by a charting or clerical error: the erroneous charting of a restored surface (i.e., interchange of a facial restoration for an occlusal restoration).

The Centralized Accounting Repository and Information System (CARIS) computer program was used to compare the dental characteristics of the remains to the available dental records of service members lost in the incident, thereby producing a list of possible candidates. Comparison of the dental remains to the CARIS dental database resulted in 1st Lt LURCOTT receiving the most matches and ranked him as the top candidate for association with the remains.

#### TWIN CHURCHARD COST CANAL

Forensic Odontology Report: CIL 2017-233-I-06

# **OPINION**

Based upon the correlations between the antemortem and postmortem dental evidence, to include restored teeth #2, #6, #9, #11, and #15; antemortem missing teeth #3, #13, #14, #16, #30, and #31; and unrestored teeth #8, #10, #20, #23, and #24, it is my opinion that the dental remains of CIL 2017-233-I-06 are probably those of

irst Lieutenant Howara I. L	URCOTT, O-665064, U.S. Army	Air Forces
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# FORENSIC ANTHROPOLOGY REPORT: CIL 2017-233-I-06

# DPAA LABORATORY

# 2 January 2019

# **DESCRIPTION OF REMAINS**

The human remains designated CIL 2017-233-I-06 consist of a mostly complete, somewhat fragmented skeleton in fair condition (Figures 1 and 2). Dentition is present (see Forensic Odontology Report: CIL 2017-233-I-06). The hyoid, coccyx, right capitate and pisiform, left triquetral and pisiform, right fourth metacarpal, and some of the hand and foot phalanges are absent. Fragments of at least nine right ribs are present, along with numerous unseriated rib fragments. Seven cervical, portions of at least eight thoracic, and portions of six lumbar, vertebrae are present. Small nondiagnostic osseous fragments mixed with sediment are associated with the remains, as well as portions of hand or toe nails. Probable desiccated brain tissue is present inside the cranium.

The remains have been consolidated from two sources, both ultimately associated with Cemetery 33 on Betio Island, Tarawa Atoll, Republic of Kiribati: remains originally designated CIL 2017-011 were disinterred from the National Memorial Cemetery of the Pacific (NMCP) on 23 January 2017; remains originally designated CIL 2017-233 were received from History Flight Inc. on 25 July 2017 (see Report of Consolidation: Consolidation of Remains Originally Accessioned as CIL 2017-011 and CIL 2017-233 into CIL 2017-233-I-06 [Tarawa Sequence 256]). Eight of the elements have been sampled for DNA analysis; six have been sampled for isotope and/or histological analysis. Some of the skeletal elements were partially reconstructed by a previous analyst using cloth tape and/or clear glue.

# MINIMUM NUMBER OF INDIVIDUALS

One. The skeleton displays good bilateral symmetry. Overall size, robusticity, and age markers are consistent throughout. Extant articulations fit well, and there is no duplication of elements.

### SEX

Male. The following morphological observations of the cranium, scored according to Buikstra and Ubelaker (1994) indicate this individual is male: well-developed nuchal region (score of 5), reasonably large mastoid process (score of 3 on the left; right side is absent),

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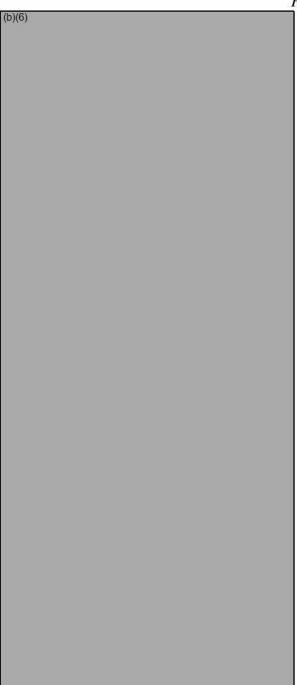


Figure 1. CIL 2017-233-I-06, skeletal layout. Hand and foot phalanges/foot sesamoids are arbitrarily sided. Scale displays decimeters.

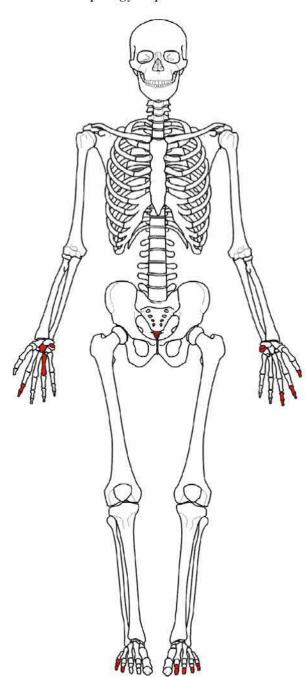


Figure 2. CIL 2017-233-I-06, skeletal diagram. Red indicates elements that are absent. Phalanges are arbitrarily sided. Missing teeth are not depicted. Present/absent ribs and vertebrae are not depicted. Fragmentation is not depicted.

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relatively robust mental eminence and glabellar region (score of 3 in both cases), and blunt supraorbital margins (score of 4, bilaterally). Walker's (2008) study of English and American males and females indicates that an individual with glabella, mastoid, and mental regions scored as 3, 3, and 3, respectively, has an 88.1% probability of being male.

In the pelvic girdle, broad ischiopubic ramus ridges, lack of subpubic concavities, and absence of ventral arcs indicate this individual is male (Phenice 1969). This individual displays bilateral greater sciatic notch scores of 3 (Buikstra and Ubelaker 1994). In Walker's (2005) study of 296 English and American males and females, 91% of individuals with greater sciatic notch scores above 2 were males. The bilateral absence of preauricular sulci is also consistent with a male individual (Buikstra and Ubelaker 1994).

# AGE

22–28 years. All visible long bone epiphyses are fully fused, including the medial end of the left clavicle, which is in the terminal Stage 4 of fusion based on criteria set forth by McKern and Stewart (1957), indicating a lower age limit of 23 years. The medial end of the right clavicle is too eroded to confidently assess the degree of epiphyseal fusion, but a partial section of this element appears more consistent with an earlier stage of epiphyseal fusion than the left.

The surface morphology of the pubic symphyses are somewhat obscured by erosion, but overall are suitably preserved to estimate age. Analysis yields a composite score of 9, using McKern and Stewart's (1957) system, which correlates to an age range of 22–28 years. Overall, age for this individual is estimated to be 22–28 years at the time of death, based on the pubic symphyses. To be conservative, the 23 year lower age limit suggested by the left clavicle is discounted due to ambiguous development on the right clavicle.

# ANCESTRY

European. Notable nonmetric observations that are consistent with European ancestry in this individual include tower-shaped nasals with a depression at nasion, moderate anterior nasal spine, sharp nasal sill, narrow nasal aperture, and retreating zygomatics (Rhine 1990; Bass 2005). Cranial measurements were analyzed using *FORDISC 3* (Jantz and Ousley 2005). Twenty one measurements were assessed by comparison to three of the male groups comprising the Forensic Data Bank (White, Black, and Japanese). Based on this comparison, this cranium classifies as most similar to the White male group, with a posterior probability of 1.000 and typicality (F) probability of 0.413. In a cross-validation test, these variables correctly classified 544 out of 608 individuals (89.5 %).

# **STATURE**

 $69.0 \pm 2.7$  inches (66.3 to 71.7 inches). The stature estimate is based on the maximum length (478 mm) and bicondylar length (476 mm) of the right femur, using the Trotter MStats data set

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Forensic Anthropology Report: CIL 2017-233-I-06

for White males, as calculated at the 95% prediction interval by the *FORDISC 3* program (Jantz and Ousley 2005).

# **TRAUMA**

Blunt force perimortem trauma is apparent in several regions of the skeleton, distinguished from postmortem damage based on overall morphology, sharp fracture margins, and fracture surfaces stained the same color as the surrounding bone. A large, shallow depressed fracture is visible along the right side of the cranium, incorporating the frontal, parietal, and squamous portion of the temporal (Figure 3). Fractured nasals appear consistent with perimortem trauma. Some of the rib fractures may have been sustained during the perimortem interval. The right radius is separated into two segments by an irregular perimortem butterfly fracture (Figure 4). There is a comminuted perimortem fracture of the distal third of the right tibia shaft. Irregular transverse perimortem fractures of the right fibula, both proximal to and distal to the midshaft, have divided this element into three relatively equal portions. The left distal fibula is absent, due to an oblique perimortem fracture. The medial malleolus of the left tibia is separated from the rest of the bone, possibly from a perimortem avulsion fracture. The left third, fourth, and fifth metatarsals are fractured at their bases, possibly due to perimortem trauma. The same applies to the base of the first right metatarsal. Overall, the pattern of blunt force trauma observed in this case is consistent with injuries sustained from blast forces or vehicle crashes, among other possible mechanisms.

# **OBSERVATIONS**

There is differential preservation between elements recovered through the History Flight Inc. excavation on Tarawa Atoll and those elements disinterred from the NMCP. The former skeletal portions are generally more friable, and appear more bleached and weathered than the latter, which are stained a medium brown and are, overall, more well-preserved (see Figure 4).

This individual is missing nearly the entire right mastoid process (see Figure 3). The margins of this defect are associated with irregular well-healed bone; it appears this individual underwent a mastoidectomy at some time well prior to death. This surgical procedure is sometimes employed to treat chronic or acute ear infections (Bento and Oliveira Fonseca 2013; Singh and Maharaj 1993).

Several of the sacral vertebral segments display a cleft neural arch, a common finding that is generally clinically insignificant (Barnes 1994). Fragments of six lumbar vertebrae are present in this individual. While the standard number of lumbar vertebrae is five, variation is normal, and the existence of a sixth lumbar segment is not uncommon (Barnes 1994).

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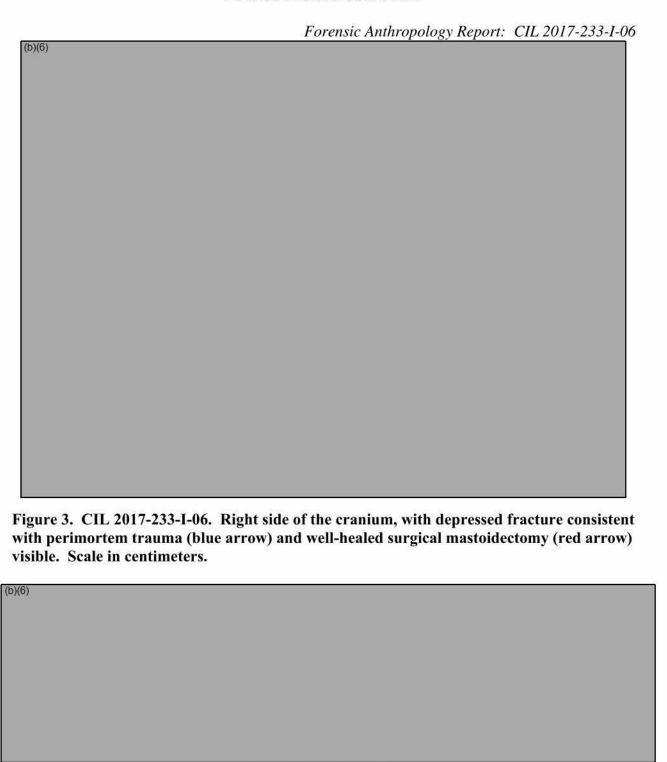


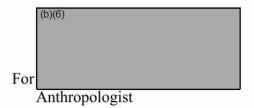
Figure 4. CIL 2017-233-I-06. Differential taphonomy visible on refitting portions of the right radius. View is anterior. The two sections of radius are separated by a perimortem butterfly fracture (red arrow). The proximal portion (the right side, in this photo), originally accessioned as CIL 2017-233, was received from a History Flight Inc. excavation in Cemetery 33, on Tarawa Atoll. The distal portion (the left side, in this photo) originally accessioned as CIL 2017-011, was recovered in the casket designated X-015, exhumed from the NMCP, which also originated from Cemetery 33 on Tarawa Atoll. Scale in centimeters.

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Forensic Anthropology Report: CIL 2017-233-I-06

# **CONCLUSIONS**

The human skeletal remains designated CIL 2017-233-I-06 consist of one male individual of European ancestry, aged 22–28 years at death, with a living stature of  $69.0 \pm 2.7$  inches. Perimortem trauma is observed on these remains, as is evidence this individual underwent a surgical mastoidectomy at some time well prior to death.



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# BIOLOGICAL PROFILE COMPARISON REPORT: CIL 2017-233-I-06

# DPAA LABORATORY

# 4 January 2019

Subsequent to the forensic anthropology analysis of the skeletal remains annotated above, a comparison of those remains to First Lieutenant (1st Lt) Howard T. LURCOTT, O-665064, U.S. Army Air Forces, was conducted. The following known physical characteristics for 1st Lt LURCOTT and CIL 2017-233-I-06 are presented for comparison:

	Forensic Anthropology Report: CIL 2017-233-I-06	1st Lt Howard T. LURCOTT
SEX:	Male	Male
AGE:	22–28 years	26 years, 10 months <sup>1</sup>
ANCESTRY:	European	White <sup>1</sup>
STATURE:	66.3–71.7 inches	69 inches <sup>1</sup>
TRAUMA:	Antemortem mastoidectomy; Blunt force perimortem trauma observed on several regions of the skeleton, consistent with injuries sustained from blast force or vehicle crash	No antemortem skeletal injuries reported; Killed in Action <sup>1</sup> , caused by plane crash <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>OQMG FORM 371 (DATA ON REMAINS NOT YET RECOVERED OR IDENTIFIED) labeled *LURCOTT*, *HOWARd T*., dtd *APR 28 1948*. Age based on date of birth *I MAR*. *1917* and date of death *21 JAN*. *1944*. <sup>2</sup> Letter from the 38TH BOMBARDMENT SQUADRON Office of the Intelligence Officer. *SUBJECT: Accident of Airplanes B-24J*, *No. 42-72999*, dtd *23 January 1944*.

The above comparison shows that there is overall excellent biological agreement between the skeletal remains and the physical characteristics of 1st Lt Howard T. LURCOTT.

(b)(6)

Anthropologist

Thursday Control Control

# MATERIAL EVIDENCE REPORT: CIL 2017-233-I-06-A-01 Through A-04

# DPAA LABORATORY

**26 November 2018** 

# **BACKGROUND**

This report discusses material evidence acquired as part of a unilateral turnover to DPAA by DPAA partner History Flight Inc. (HF). The material evidence was turned over to (b)(6) during a DPAA scientific oversight visit to Betio Island, Tarawa Atoll, Republic of Kiribati (formerly the Gilbert Islands). The evidentiary items were reportedly recovered in direct association with osseous remains (designated as HF 2017-033 SE Burial I-06) during the excavation of site KR-00029, believed to be Cemetery 33 on Betio Island. According to historical reports, Cemetery 33 is one of the reported burial sites of U.S. service members unaccounted for as a result of U.S. WWII-era military activities during 1943–1944 on Betio Island. The items discussed in this report are associated with the 21 January 1944 air loss incident WWII-02629-M. The material evidence was accessioned into the DPAA Laboratory on 25 July 2017 as CIL 2017-233. Items labeled as HF 2017-033 SE Burial I-06 were given the sub-accession CIL 2017-233-I-06.

# MATERIAL EVIDENCE

The following item were analyzed according to DPAA Laboratory analytical procedures in CIL Material Evidence Analysis SOP 3.6. The items have minimal probative value and are therefore presented in table format (Table 1). Photographs of the items are depicted in Figures 1–3. Following analysis, the evidence was transferred to a new labeled bag upon which the accession number was recorded. Additionally, several items were approved as non-probative by Laboratory Management on 8 November 2018.

#### FOR OFFICIAL LICE ONLY

Material Evidence Report: CIL 2017-233-I-06-A-01 Through A-04

Accession Number	Item Description	n=	Reference	Figure Number
CIL 2017-233-I-06-A-01	Sledge hammer head	1	N/A	1
CIL 2017-233-I-06-A-02	Buckle and Clip, End, Web, Belt	1	U.S. Army Quartermaster Corps 1955	2
CIL 2017-233-I-06-A-03	Four-hole sewing buttons consistent with Class D, Type II, Style 24	8	U.S. Army Quartermaster Corps 1945	3
CIL 2017-233-I-06-A-04	Four-hole sewing button consistent with Class D, Type II	1	U.S. Army Quartermaster Corps 1945	3



Figure 1. CIL 2017-233-I-06-A-01, Sledge hammer head.

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Material Evidence Report: CIL 2017-233-I-06-A-01 Through A-04



Figure 2. CIL 2017-233-I-06-A-02, Buckle and Clip, End, Web, Belt.



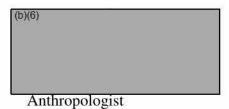
Figure 3. CIL 2017-233-I-06-A-03, representative selection of four-hole sewing buttons (left). CIL 2017-233-I-06-A-04, four-hole sewing button (right).

#### THURSDAY COME

Material Evidence Report: CIL 2017-233-I-06-A-01 Through A-04

# **FINDINGS**

The material evidence discussed in this report was reportedly recovered in direct association with the osseous remains designated CIL 2017-233-I-06 during the excavation of site KR-00029, believed to be Cemetery 33, on Betio Island, Tarawa Atoll, Republic of Kiribati (formerly the Gilbert Islands) by DPAA partner, History Flight Inc. The sledge hammer head (CIL 2017-233-I-06-A-01) is not consistent with items issued to or used by U.S. military personnel during World War II; however, it was found in direct contact with osseous remains (CIL 2017-233-I-06). The items designated CIL 2017-233-I-06-A-02 through A-04 are consistent with items issued to or used by U.S. military personnel during World War II. The lack of markings or inscriptions on the items in this report limit the ability to directly attribute them to a specific individual. Nonetheless, it is very likely that these items are associated with CIL 2017-233-I-06, due to their presumed direct association with the osseous remains.



# REFERENCES

U.S. Army Quartermaster Corps

1945 V-B-871a; Federal Standard Stock Catalog; Section IV (Part 5); Federal Specifications for Buttons.

1955 MIL-B-1963B: Military Specification; Buckle and Clip, End, Web, Belt. Washington, D.C.

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TYPE OF DISPOSITION DATE OF DISPOSITION							
	REGISTRATION OF	VITAL STATISTICS					
REGISTRATION (Town and Country)	DATE REGISTERED	FILE NAME					
	,=	STATE	OTHER				
NAME OF FUNERAL DIRECTOR	ADDRESS	1					
SIGNATURE OF AUTHORIZED INDIVIDUAL	<u>,                                      </u>						