

DEFENSE POW/MIA ACCOUNTING AGENCY

The Ploiești Unknowns Project



Fulfilling Our Nation's Promise

Operation TIDAL WAVE

- August 1 1943
- Initially code-named Operation SOAPSUDS
- Attacked oil refineries in Ploiești, Romania
- Intended to deprive German forces of 1/3 of oil supply
- First large-scale, low-altitude attack by U.S. heavy bomber aircraft
- 225 U.S. Airmen killed during Operation TIDAL WAVE

Five Bombardment Groups

44th 93d 98th 376th 389th



War Theatre #15 (Bengasi, Cirenaica, Libya)
OPERATIONS

Orig. 4x5 neg. rec'd 10 August 1943 from 9th
Combat Camera Unit, APO #696.
(over)



67049A.C.

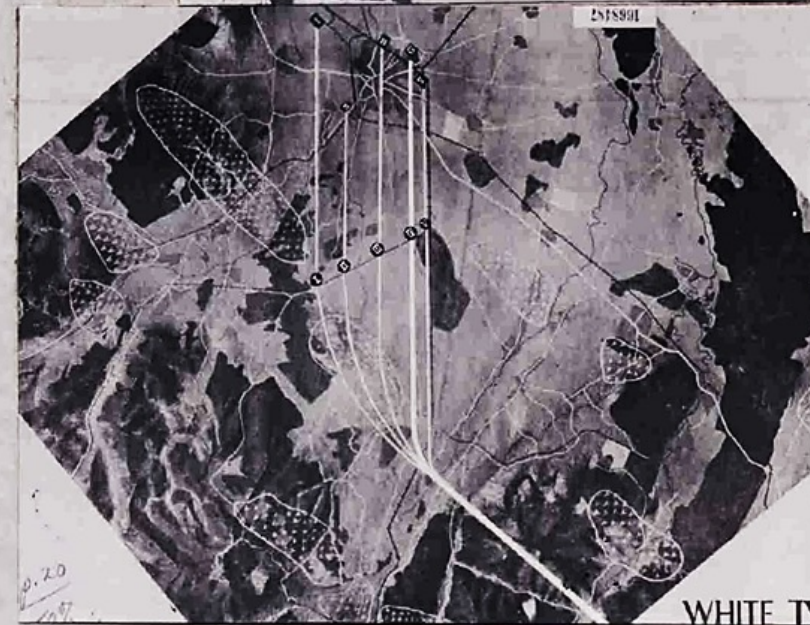
A28298



67036A.C.

Final briefing to
the 376th BG

Liberators
over
African Base



Vertical Photo of the 1:50,000 Relief Model of the Ploesti Area
Showing Routes of Target Forces. Taken from Target Sheet.



Oblique Photo of a Section of the Detailed Model of Ploesti
Showing Targets White IV and V.

TABLE I.

TARGETS AND TARGET FORCES PLANS*

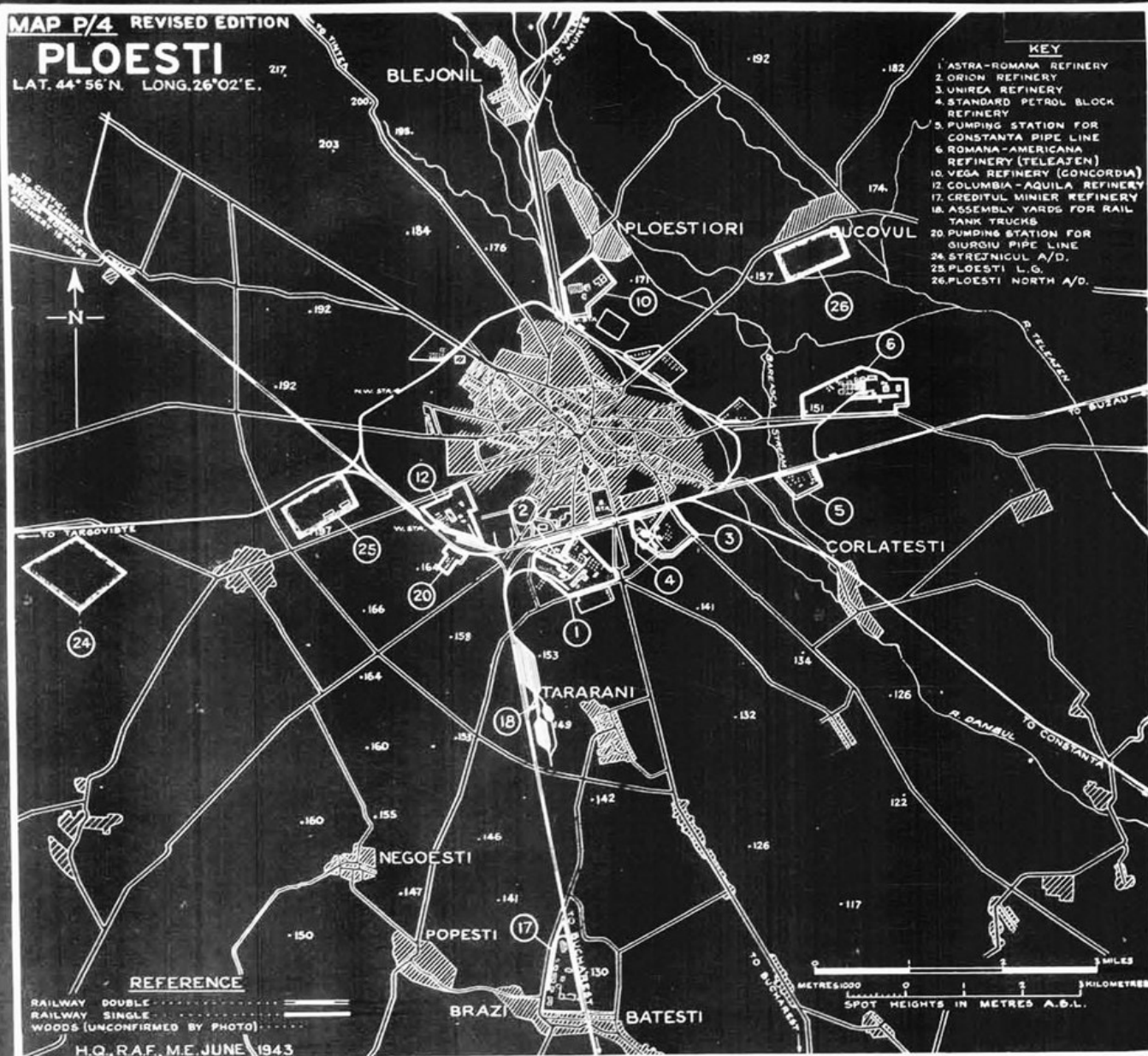
Target	Refinery	No. of Key Instls.	Order of Import.	A/c Alltd.	Place in Form.	Flight Plan over Target	Group Assgd.	Commander and Leader
White I	Romana Americana	6	3	24	1	4 waves of 6 a/c	376th	Col. Compton Lt. Flavelle
White II	Concordia Vega	6	2	21	2	3 waves of 6 a/c 1 wave of 3 a/c	93d	Lt. Col. Baker Maj. Brown
White III	Standard Petrol Block Unirea Speranta	3	5	12	3	4 waves of 3 a/c	93d	Lt. Col. Baker Maj. Potts
White IV	Astra Romana Unirea Orion	10	1	40	4	4 waves of 10 a/c	98th	Col. Kane Capt. Young
White V	Colombia Aquila	6 (3)	7	15	5	5 waves of 3 a/c	44th	Col. Johnson Maj. Brandon
Blue	Creditul Minier (Brazi)	3	6	18	6	3 waves of 6 a/c	44th	Lt. Col. Posey Capt. Diehl
Red	Steaus Romana (Campina)	7	4	24	7	8 waves of 3 a/c	389th	Col. Wood Capt. Caldwell

* The Floesti Mission was planned on the basis of 154 aircraft participating. Actually, 177 successfully took off. The 23 spares appear to have been distributed among the seven target forces, as follows: White I, 4; White II, 4; White III, 0; White IV, 6; White V, 2; Blue, 2; and Red, 5.

MAP P/4 REVISED EDITION

PLOESTI

LAT. 44° 56' N. LONG. 26° 02' E.



DECLASSIFIED
Authority *AND 96 P133*

were received from the U.K. during the period and 1 from the Air Service Command. The principal reason for so many non operations A/C was the lack of engines. Two days had been allotted for maintenance at the beginning and end of the maintenance period. Engines were slow in arriving, but by D-2 sufficient engines were on hand for all aircraft, but very little time to make the installations. By late afternoon on D-1, 193 aircraft were in commission for the mission out of a total of 202. Three A/C had been badly damaged during practice. Engines had not been received in sufficient time for change on the other 4.

5. Observations on the Execution of the Attack Plan.
a. Aircraft taking off and reaching target.

On D-day 178 aircraft took off, one crashed and burned in trying to return to field after take-off, 1 crashed enroute to target, 12 turned back due to mechanical trouble. 164 A/C or 94% reached the target.

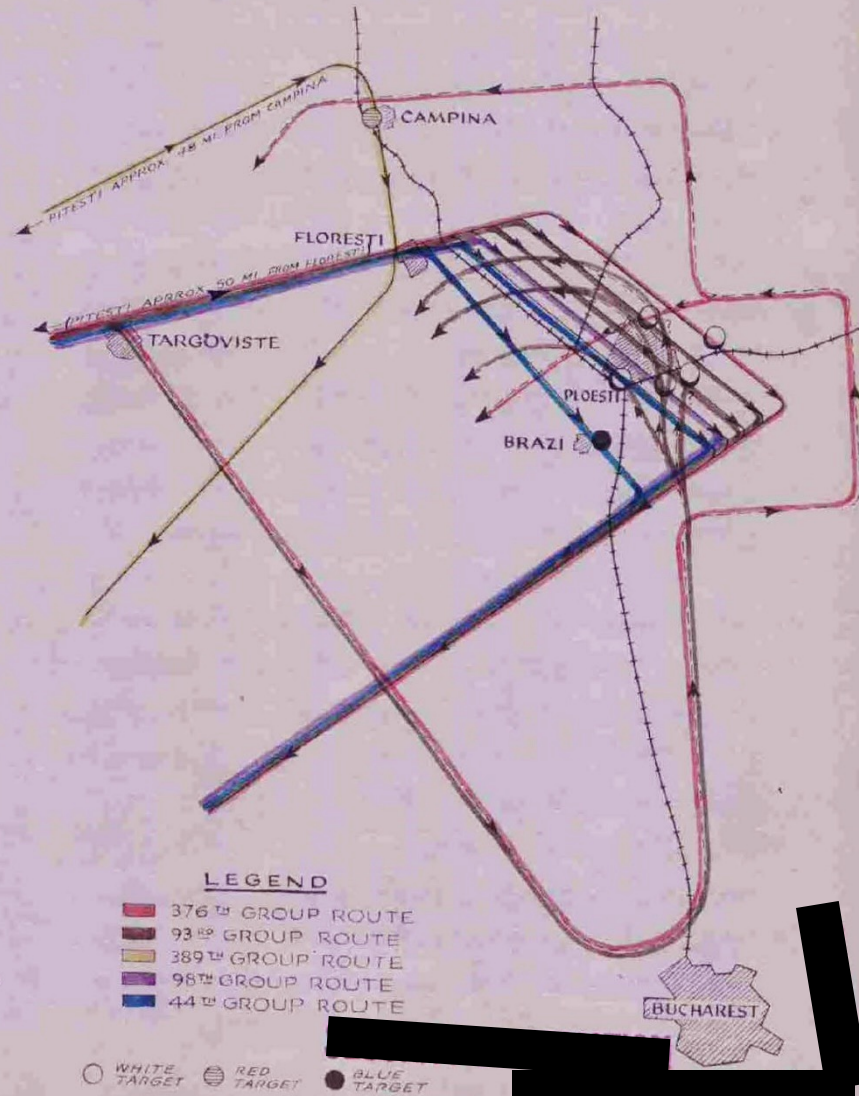
b. Assembly and route-out.

- (1) The assembly was accomplished on time by all but the 93rd Group a part of which was late in taking off due to dust on the airdrome. This Group was able to gain its position in the formation by the time Corfu Island was reached.
- (2) Shortly after leaving the Greek coast towering cumulus clouds from 10,000 to 15,000 feet made it difficult to follow the leading Group which was flying on top. The 3rd Group elected to go under the clouds at this point thereby destroying the formation and causing the last three Groups to arrive 30 minutes late at the target. Upon arrival at the Danube the weather cleared and the leader was aware for the first time that only two groups were together. He elected to continue with this force and carry out the attack. No enemy opposition was encountered enroute to the target.

The attack.

The leading Group flying at tree top level turned short of the I P passing west of Ploesti and did not realize the mistake until in the outskirts of Bucarest. The second Group had followed the first in accordance to plan. The leader then turned to the north and gave instructions that the attack should be made from the south instead of the northwest as originally planned. The aircraft were at tree top level during the attack and navigation was very difficult. The results of attack were that Target White #1 was missed entirely, but II, III, IV and V and possibly Blue were hit. These aircraft arrived at their I Ps. These Groups carried out the attack according to plan with excellent results hitting Red, White IV, White V and Blue.

THE ATTACK AS PLANNED AND AS EXECUTED



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Authority *AND 96 P133*

R.A.F. Form 683

CYPER MESSAGE

To: 1X BOMBER COMMAND-NINTH USAF ALL GROUPS AND 178 AND 462 SQUADRONS.

From: 44 BOMB GROUP

REF: D G AUGUST 1

A. 44 BOMB GROUP B. 37 B 24 D'S C. BENINA MAIN D. 0430GWT

E. PLOESTI BLUE AND WHITE FIVE. F. 37 IN AREA G. BLUE 1210

GUT WHITE FIVE 1213 GWT H. 120 TO 250 FEET. I. 48 X 500

POUND GENERAL PURPOSE 139 X 1000 POUND GENERAL PURPOSE 22

J. WHITE FIVE ALREADY IN FLAMES BOMBED THROUGH SMOKE ON RE-

COGNIZED STACKS ON TARGET BOTH DESTROYED. K. STRATO CUMULUS

HIGH VISIBILITY GOOD EXCEPT FOR SMOKE SCREEN. L. INTENSE

MACHINE GUN AND LIGHT FLAK HEAVY FLAK AT MINIMUM ELEVATION

BETWEEN INITIAL POINT AND TARGET M. NUMEROUS CATEGORY A RE-

TURNED SHIPS DAMAGE TO 14 UNREPORTED AIRCRAFT UNDETERMINED.

N. 16-PO O. UNDETERMINED. P. 13 DESTROYED NO PROBABLES

ONE DAMAGED. Q. 23 B 24 D'S LANDED BENINA MAIN 14 UNREPORTED

R. 1800GWT S. 23 T. ONE B 24 BARRED W LANDED.

SGT KLYS

Serial No. 189

Date

Receipt

Dispatch

Time of

System

020230C

020600C

020625C

020700C

DECLASSIFIED

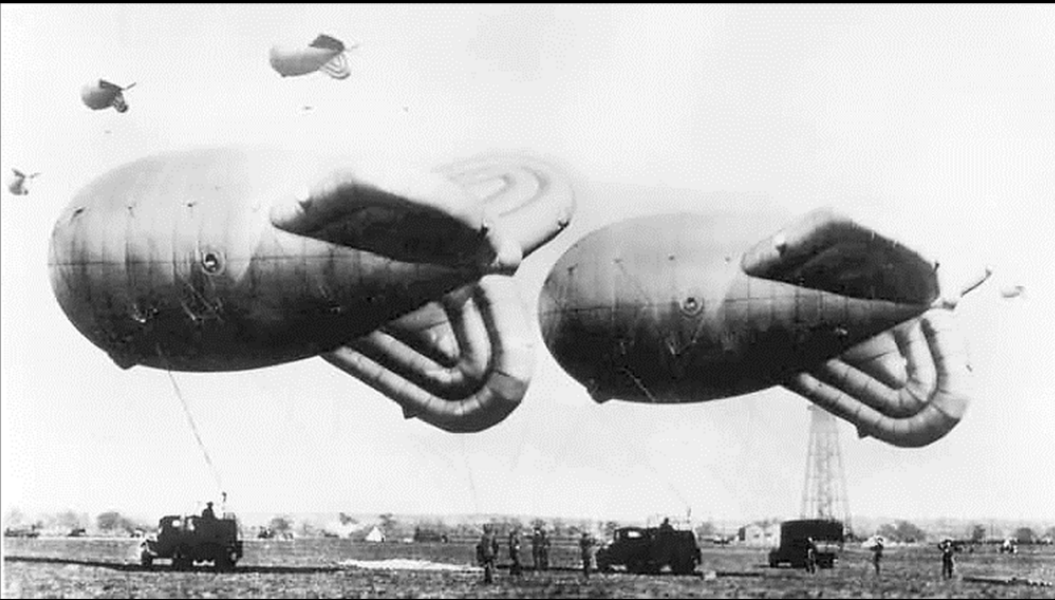
E.O. 11652, Sec. 302 and 303 of 50

CSG Ref: May 2, 1972

By: *als/*

REASON DATA

German anti-aircraft tactics



4x5 negs. rec'd 11/5/43 from "Air Force" Editorial Office, 101 Park Ave., N.Y.
Used in Nov., 1943 issue of "Air Force" Mag.

A26910



25787 A.C.

NO. 5-CREW MEN SOON FOUND TARGETS IMPERCEPTIBLE
DUE TO DENSE SMOKE. NOTE SMOKE POTS ALONG
ROAD IN LOWER PART OF PHOTO.
1541.399

INDEXED

Attack on Ploesti, Rumania. Smoke pots fired by the enemy obscured some of the targets.

War Theatre #12 (Ploesti, Rumania) - CAPTURED
MATERIAL
(over)

Print rec'd Dec 44 from Publications Sec., AC/
AS Intelligence. Used in Dec 44 issue of Impact
Copied 12/14/44. Stamped: No Obj. to Pub., BPR
12/23/44 (1) W.D.



Armament
Captured equipment

A26779

55240 AC



SORTIE REPORT (Part A)				RAF Form 441 A
Sheet No.	Oprel. Ref. No.	Date Aug. 1, 1943	Squadron 343rd	
Type of Aircraft	B-24 D	P-Lt. Col. Bleyer, Julian M., Captain CP-Lt. Watt, David S.		
Aircraft No.	896	N-Lt. Parker, Charles M.		
Aircraft Letter	U	Crew B-Lt. Ramsey, Jack H. AS-1/Sgt. Burton, Russell E. R-1/Sgt. McCown, Bobby E. G-1/Sgt. Beauregard, Francis (M) G-2/Sgt. Kozak, Frank E. G-3/Sgt. Look, Robert E. Photo-G-4/Sgt. Jeswick, Jerry Acrodrone or L.G.		
Time Up	4:10	Lete		
Time Down	18:10			
Total Time	14:00			
Type of Cloud	Cumulus	Map or Chart		
Amount of Cloud	4/10ths	Reference		
Base of Cloud	6 - 7,000			
Visibility	10 miles plus			
General Weather	Good			
Task or Duty	Ploesti	PP-Boiler house (also cracking house)		
Narrative				
B-24 down in water in flames.				
<p>Made run of 127° for 120 seconds, dropping 6 x 500 lb. bombs, fusing M124 with 1 hour delay in close toggle train. Boxes of Mark III (120) incendiaries out over target. Aiming point-boiler and cracking house, Astra Romana refinery. Observed bombs to hit short and to skip into target. Some bounced right thru target. Observed some bombs to go thru protective walls.</p> <p>Observed three (3) barrage balloons after passing over target.</p> <p>On approaching the target very great amount of small calibre A/A was being thrown up. Large black bursts of A/A followed formation, bursting just above. Bursts were smaller than high Alt. A/A. The target area was surrounded on north by smoke pots, and dense black smoke covered target area from burning oil tanks. Oil train setting at about U-14 was burning, probably as a result of A/A fire. Observed total of 5 to 7 B-24's down in target area.</p> <p>Pursuit: Fighters attacked in three waves. 1st large wave of Me 110's, 109's and Me202 attacked just after bombs were dropped. Our a/c at 10,000 alt. and the enemy a/c had to break off attacks above our formation and pull up. Sgt. McCown, top turret gunner shot down 1 Me110, 1 Me109 and 1 (Me109 or Heinkel). Sgt. Beauregard shot down one Me109.</p> <p>2nd wave of fighters attacked at 38 20 N 19 40 E at about 13:40 G.M.T. Lt. Gunn in 364 "Y" was shot down at 13:40, saw about four men bail out, plane was on fire then it exploded and broke up. Lt. Darlington in 840 "P" was shot down at 13:50, two engines out on same side. Ten men bailed out. The fighters came up from behind. Sgt. Kozak shot down 1 FW 190 and 2 unidentified a/c. Sgt. Beauregard shot down 1 Me 109. Sgt. Look shot down one Me 109.</p> <p>(OVER)</p>				
reverse) to be completed according to relevant pro-forms in H.Q. R.A.F. M.E. Instruction 34.				
P.T.O.				
Jul-Sep1943, "Air Force Historical Research Agency, Maxwell Air Force Base, AL				
Page 243 of 624				

Aquila Refinery- Oil storage tanks at the Columbia Aquila in flames, with another wave of Consolidated B-24 airplanes. Fourteen American planes are visible in this shot. The mass of pipes, tubes, and towers of the distillation and plants was an important target.

THEATRE #12- Ploesti, Rumania (Bombing)

SCHİTA

CU
AVIOANELE CAZUTE CU OCAZIA INCURSIUNILOR AVIATIEI
AMERICANE ÎN ZIUA DE 1 AUGUST 1943.

INCLOSURE No. 2
ANEXA Nr. 2.

LEGENDA

- Avioane căzute pe raza oraşului PLOEŞTI
- Avioane căzute pe teritoriul rural.

The map shows the following locations of downed aircraft:

- City of Ploesti (Blue dots):** Plopu, Chitorani, Lotoliasca, Ploesti, Trestieni, Barcanesti, Berceşti, Brazi, Poenari, Burchi.
- Rural Areas (Red dots):** Sâmpina, Neleles, Targoviste, Buşotiu, Vistina, Butimani, Coetoc, Ogrezeni, Giurgiu.

GENERAL INSPECTORATE OF THE GENDARMERIE
Bureau of Safety and Public Order
INSPECTORATUL GENERAL AL J.
DIRECȚIA SIGURANȚEI ȘI ORDINEI PUBLICE

FOLDER
CONTAINING REPORT BY MAJOR CONSTANTIN UNGA
AUGUST 1943 AMERICAN AIR BOMBING OVER THE PLOESTI

DOSA
REFERATUL MAIOR UNGA C^{lin}
BOMBARDAMENTULUI AMERICAN EFEC
1 AUGUST 1943 ASUPRA ZONEI PETR
PLOESTI

Rum. DET. AND FFC R
INCLUDED HEREIN.

248-186
GENERAL INSPECTORATE OF THE JANDARMERIE
Bureau of Safety and Public Order
INSPECTORATUL GENERAL AL JANDARMERIEI
DIRECȚIA SIGURANȚEI ȘI ORDINII PUBLICE

FOLDER

CONTAINING REPORT BY MAJOR CONSTANTIN UNGA ON 1ST
AUGUST 1943 AMERICAN AIR BOMBING OVER THE PLOESTI OIL REGION

DOSAR

REFERATUL MAIOR UNGA C^{lin} ASUPRA
BOMBARDAMENTULUI AMERICAN EFECTUAT LA
1 AUGUST 1943 ASUPRA ZONEI PETROLIFERE-
PLOEȘTI

RUM. DET. AND FFC REPORT
INCLUDED HEREIN.

FILE 3

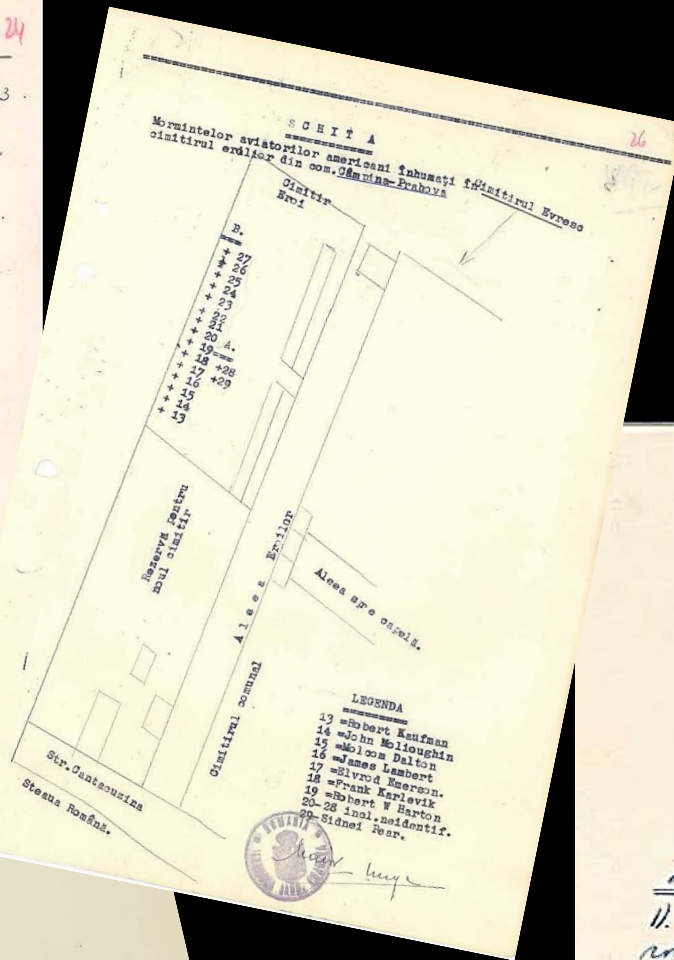
JABEL

ANEXA N° 8

24

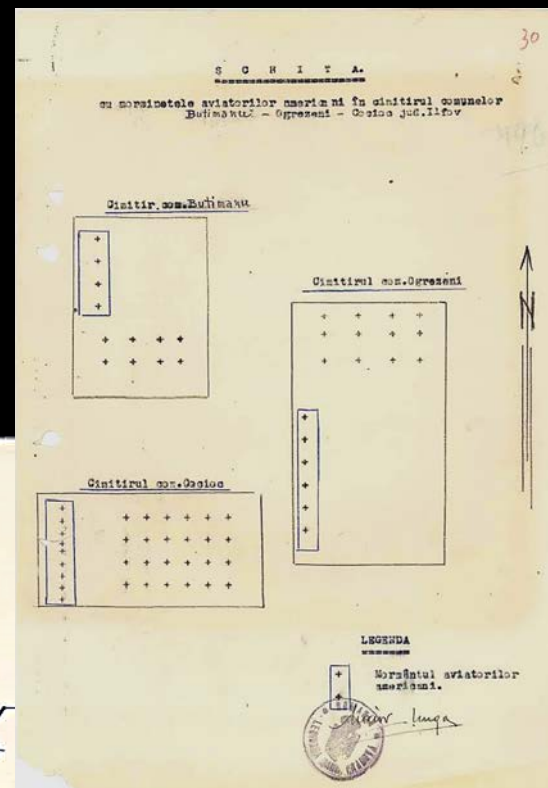
Situație Numerică a avioanelor căzute pe ziua de 1 August 1993
în zona petrolieră Plocești - Trahova.

N° cor.	Localitatea unde a căzut avionul.	Situația personală navigatori.			Observații.
		Morți	Răniți	Prinși	
1	Județ. ROMANIA.	1	-	5	
2	Județ. Piatra.	-	1	1	
3	Județ. Mărcuș.	-	1	-	
4	" Spălna.	-	-	-	
5	Județ. Ișvoarele.	-	-	3	
6	Județ. DAMBOVITA.	1	-	10	
7	Județ. Buzoiaș.	-	1	-	
8	Visina.	1	-	4	
9	Județ. ILFOV.	1	6	-	
10	Com. Oprești.	1	4	-	
11	" Cocloș.	1	9	-	
12	Județ. TRAHOVA.	2	17	3	
13	Com. CÂMPINA.	1	-	-	
14	" Trești.	1	-	10	
15	" Poenari Burchi.	1	6	-	
16	" Bărcănești.	-	-	-	
17	" Cocorâști.	-	-	-	
18	" Tinosu.	-	-	-	
19	" Plocești.	-	-	-	
20	" Plopu.	-	-	-	
21	" Chitran.	-	-	-	
22	" Bercești.	-	-	-	
23	" Iatărani.	-	-	-	
24	" Târgșorul Nou.	-	-	-	
25	" Nelele.	-	-	-	
26	" Sinaia.	-	-	-	
27	" Brazi.	-	-	-	
28	Județ. PLOESTI.	1	-	-	
29	Cartier Cimitir Eternitatea.	2	-	-	
30	" PENETENCIAR.	1	-	-	
31	" Fabrica Creștot.	1	-	-	
32	" CFR. Sud. Nord.	1	-	-	
33	" Danova Bucov.	1	-	-	
34	" Soc. Unirea.	3	8	-	
35		116			

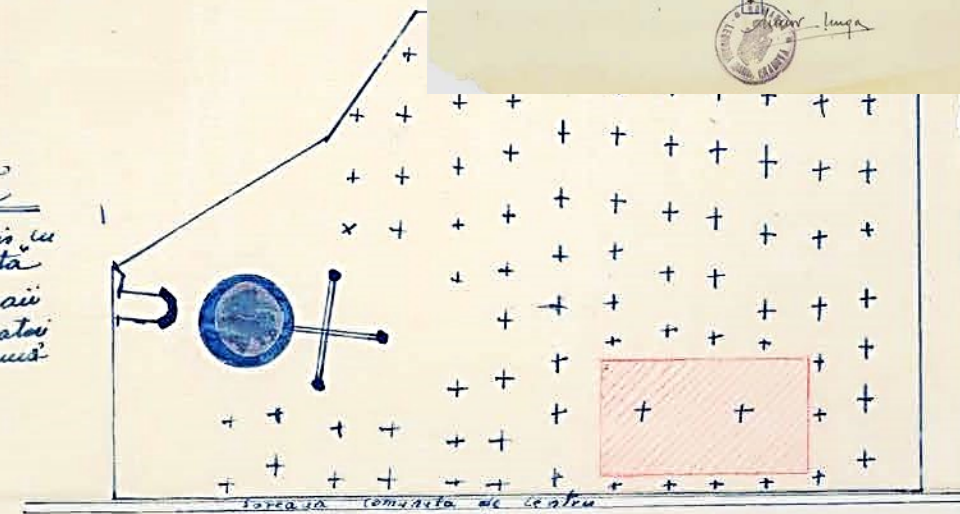


Sketch maps from small Romanian cemeteries where U.S. remains were temporarily interred

Sechito Cimitirului comunei Chitran
unde sunt înmormântați doi
aviatori Americani.

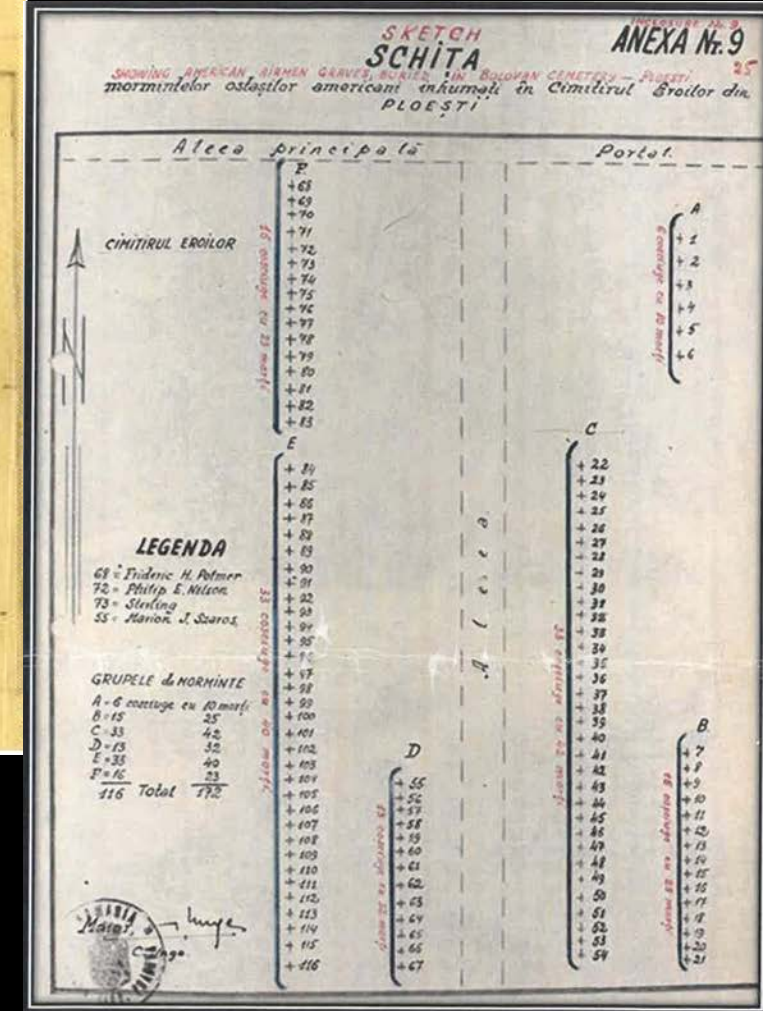


Legendă
1. Locul în care
am. reprezintă
locul unde erau
amercianii aviatori
ce s-au înmormântat.



Sechito Cimitirului comunei Chitran
unde sunt înmormântați doi
aviatori Americani.

Sketch map created from the exhumations of American graves at Bolovan Cemetery, Ploiești in 1946-1947.



Romanian sketch map of the military section of the Bolovan Cemetery, Ploiești showing the graves of Americans, Romanians, Russians, and Germans.

Inventory of a casket upon exhumation by Romanian and American authorities in 1946-1947.

Declassified E.O. 12958
Complete copy of an "Unknown" or "X" file digitized from the original held at the Washington National Records Center, Suitland, MD.

1 F 8464

FINDINGS IN GRAVE

12 January 1947

1. Box 92, Row 4, Plot E, Section Hero, contained the following upon disinterment:

a. One crushed skull with upper and lower jaws with teeth.

b. Another crushed skull with parts of lower jaw.

c. Remnants of parachute.

d. One boy-scout knife.

2. There were no clothing remains.

3. Disposition of box and above findings show these remains to be two American airmen who crashed on August, 1st, 1943.

J. Siladie
Civ. Investigator

James A. Fisher

48

Declassified E.O. 12958
Complete copy of an "Unknown" or "X" file digitized from the original held at the Washington National Records Center, Suitland, MD.

REPORT OF INVESTIGATION

AREA SEARCH

AGRC Form 10 (Revised)

1 January 1946.

NAME Unknown X-5141 RANK Unknown ASN

ORGANIZATION Unknown A.A.P.

MEANS OF IDENTIFICATION None

(All statements above this line will be completed, upon final at the unit processing point.)

SECTION A - GENERAL (To be completed by investigators in all cases)

1. Was positive identity acquired for the deceased through the sketch? If so, state the following information:

a. NAME RANK

b. ORGANIZATION

2. Was partial identification established? No If so believe the deceased to be: Common grave of :

a. NAME Unkns X-129 and X-130 RANK

b. ORGANIZATION Uncertain

3. NAMES OF OTHER DECEASED BURIED IN IMMEDIATE VICINITY:
Common grave of : X-131, X-132 and X-133; L
(Use reverse side for listing of crew members from aircraft)

a. Date of above burials 3 August 1943 Common Grave

41

1

Declassified E.O. 12958
Complete copy of an "Unknown" or "X" file digitized from the original held at the Washington National Records Center, Suitland, MD.

1 F 8464

15. Where was the place of death? near Floesti Coords SX2649 Bucarest 1/250,000

Give basis Roumanian information

16. Where were the remains found? near crash Coords

a. By Whom? Roumanians

b. Is sketch attached? No

17. Was a casket used? Yes Who furnished the casket? Roumanians

Type of casket Wooden How marked? Not marked

18. Who made the burial Roumanians
(Civilian, American MII, or German MII)

a. What are the names and addresses? Local Roum. authorities

b. Are certificates and statements attached? Yes

SECTION B - AIR CORPS DECEASED (To be Completed only if Deceased is believed to be a member of the AAF).

19. Were remains found in the plane wreckage? Unkn

a. Give location in plane from which the bodies were removed
(Tail gunner, pilot, radio, turret, etc., or front, side, of plane)

b. Near wreckage?

20. Scene of crash must be investigated. Give complete results of Investigation (if removed, state when and by whom).

a. Type of Plane Unkn

b. Markings and/or name on plane

c. Give numbers on motors, machine guns, instruments, radios or other equipment:

21. How did crash occur? Unkn Anti-aircraft

Enemy Planes? Collision?

43

3

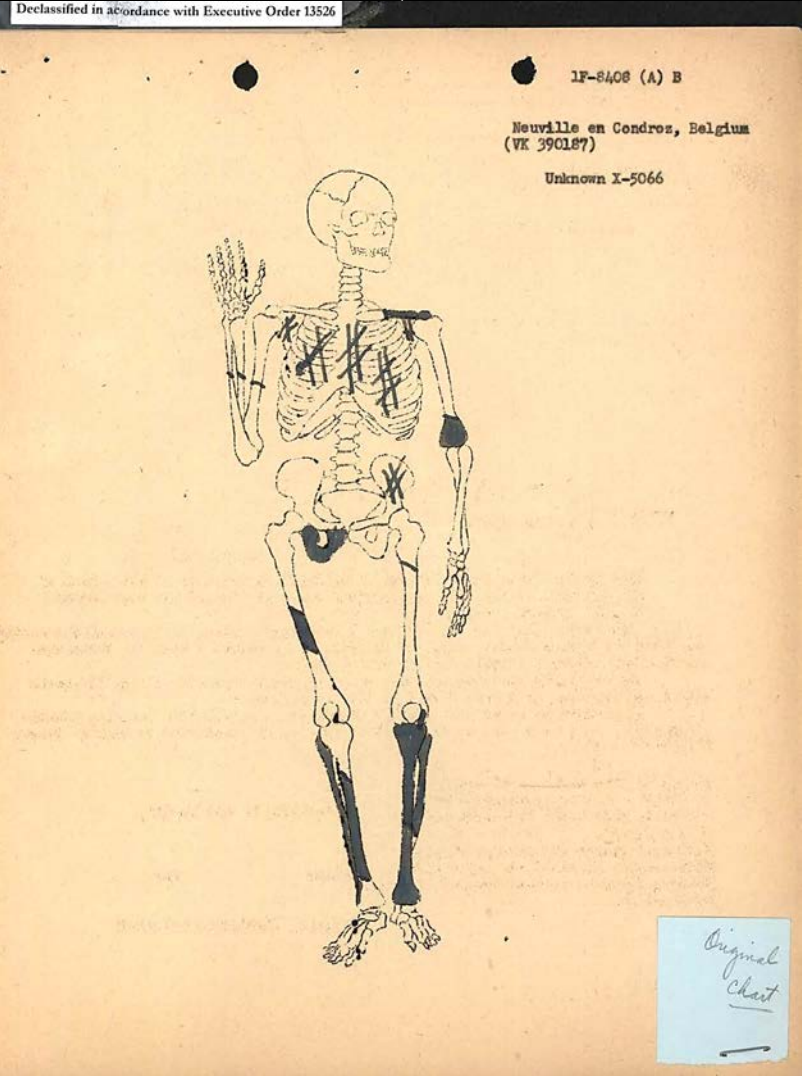
Typical AGRC recovery
report form

American Graves Registration Command (AGRC) technicians preparing equipment to examine remains



German POWs excavating graves at a temporary U.S. cemetery in Europe

Example of a skeletal chart for an unidentified set of remains recovered from Bolovan Cemetery, Ploiești (Portions in black are missing)



Declassified in accordance with Executive Order 13526

1F-8394

G. R. & E. D.V.
OFFICE OF THE CHIEF QUARTERMASTER
U.S. ARMY
H.Q. COM ZONE, KYOURA

TOOTH CHART

4 February 1947

Unknown X-5059 Unknown Date Unknown

Last Name: Unknown First: Initial: Rank: BTB: AAP Serial No.:

Unit: Vicinity of Ploesti, Rumania Estimated: 1 August 1943 Plane Crash

Place of Death: Date of Death: Cause of Death:

Right Left

	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
NOTE	A	A	A	A	S	S	⊗	S	S	S	A	A	⊗	A	A	NOTE
	M	D	M	D	L	F		F	L	M	D	M	D			
Side views																
TOP																
VIEW																
Side Views																
NOTE	A	A	A	A									A	A	A	NOTE
	D	D	D	D									D	D	D	
	16	15	14	13	12	11	10	9	8	10	11	12	13	14	15	16

See remains.

This dental chart is very important and should be filled in with great care. There are 32 teeth to be accounted for, as shown by the numbers on the chart. Beginning at the middle line in both upper and lower jaws, the teeth are arranged symmetrically on either side and classed as incisors (cutting teeth), cuspids or canines (tearing teeth), bicuspids (chewing teeth), and molars (principal chewing teeth). An examination should be made and findings charted to cover the following basic conditions: Lost teeth, crowned teeth, bridge work, fillings, caries (cavities of decay), dentures (plates), and any deformity of jaws found. See reverse side for illustrations.

Donald R. Seale
Signature of Officer or other person who prepared Tooth chart

ELLSWORTH T. MAC INTYRE, Captain JMC. C.T.P.
Verified by G. R. & E. Office

GRAVES REGISTRATION
FORM N. 1-A

Example of a tooth chart for an unidentified set of remains recovered from Bolovan Cemetery, Ploiești

Example of a declaration that remains recovered from Bolovan Cemetery, Ploiești are determined Unidentifiable

Declassified in accordance with Executive Order 13526

UNIDENTIFIABLE

UNKNOWN No. X-5059 U.S. MILITARY CEMETERY Neuville, Belgium

Unknown X-5059 was recovered from the military and civilian cemetery of Bolovan, Floesti, Prahova, Rumania. The estimated date of death of X-5059 is 1 August 1943.

The physical characteristics of unknown X-5059 have been compared with like information for casualties of the Floesti area and no favorable association could be made.

As a result of the investigation mentioned above this Unknown X-5059 is being declared Unidentifiable.

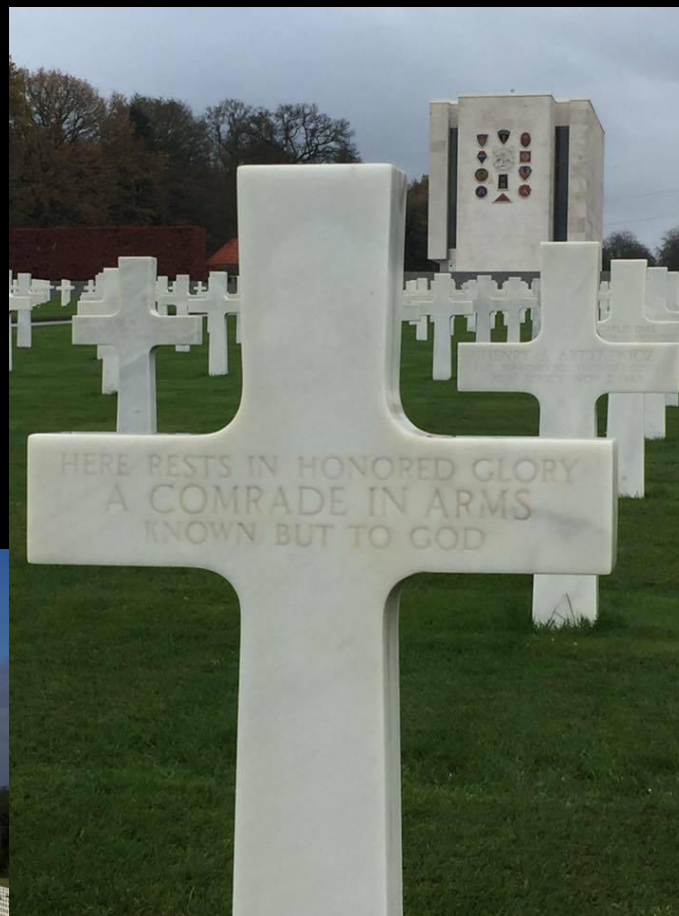
M. Thorne
Investigator

gfb

Ardennes American Cemetery
in Belgium



Plot Area at
Henri-Chapelle American Cemetery
in Belgium



Cross Marker on
the grave of an
Unknown U.S.
Service Member
Killed in WWII







Entrance to Bolovan Cemetery



2d Lt Earl Ferguson



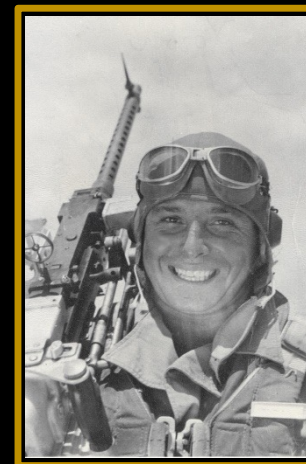
1st Lt Joseph Finneran



Sgt Howard Gotts



2d Lt William Harth, Jr



T Sgt Max Lower



S Sgt Charles McMackin



T Sgt Frank Norris



S Sgt Vincent Politte



T Sgt Alfred Turgeon