WAR DEPARTMENT
AAF Form No. 14
(Rev. 1 Oct. '45)

RESTRICTED WHEN ENTRIES ARE MADE HEREON

ARMY AIR FORCES

REPORT OF MAJOR ACCIDENT

Use this form in accordance with AAF Reg. 62-14 and "Aircraft Accident Investigator's Handbook" issued by Office of Flying Safety, Headquarters, AAF.

Fill in all spaces except where otherwise indicated.

If additional space is needed, use additional sheet(s) and identify by proper section letter and subsection number.

FIELD OFFICES—DO NOT USE THIS SPACE

ACTION	DATE
PRELIMINARY REPORT RECEIVED	7-22
FORM 14 RECEIVED	
EVALUATED BY CWM	8-24
VERIFIED BY	
CHECKED BY	
CODED BY	8-26

TYPE, MODEL AND SERIES: B-29

ACCIDENT No.

NO. AIRCRAFT INVOLVED

Section A—GENERAL INFORMATION

1. PLACE OF ACCIDENT—State, County, Nearest Town, Distance and Direction from Same.	Nearest Army Airfield, Distance and Direction from Same.
Nevada, Clark, Boulder City, 30 Miles NE	Muroc AFB, 217 Miles NE

2. WAS COLLISION WITH OTHER AIRCRAFT?	AF NOS. OF AIRCRAFT INVOLVED (File separate Form 14 for each aircraft)	DATE	HOUR AND TIME ZONE	
☐ YES ☒ NO		21 Jul 48	1135 PST	☒ DAY ☐ NIGHT

Section B—AIRCRAFT

1. AIRCRAFT NO.	2. TYPE MODEL SERIES.	3. HOME STATION
45-21847	B - 29 - A	Armitage Field, N.O.T.S., Inyokern, Calif.

4. AIR FORCE OR COMMAND	SUBCOMMAND	WING	GROUP NO. AND TYPE	SQUADRON
AMC			Upper Air Research Project #288	

5. DATE OF MANUFACTURE	TOTAL HOURS	DATE LAST OVERHAUL	OVERHAULING DEPOT OR SUB-DEPOT	HOURS SINCE OVERHAUL
Acceptance 31 Sep 45	497:05			

6. Attach detailed statement of tech orders having direct bearing on this accident which have not been complied with. Describe orders and give reasons for noncompliance

Section C—OPERATOR (Person at controls at time of accident)

1. LAST NAME	FIRST NAME	MIDDLE INITIAL	GRADE	BRANCH	ASN	SEX	AGE
MADISON	ROBERT	M.	Captain	USAFR	AO-401195	M	29

2. ATTACHED STATION	AF OR COMMAND	SUBCOMMAND	WING	GROUP NO. AND TYPE	SQUADRON
Naval Air Station, Inyokern, Calif.					

3. ASSIGNED STATION	AF OR COMMAND	SUBCOMMAND	WING	GROUP NO. AND TYPE	SQUADRON
Wright-Patterson AFB	AMC				

4. AERONAUTICAL RATING? ☒ YES ☐ NO	PRESENT RATING	DATE RECEIVED	5. NORMAL DUTY STATUS
	Pilot	20 Dec 40	Pilot TB-29 Crew

Section D—OPERATOR'S FLYING EXPERIENCE (including civilian)

FLYING TIME	1ST PILOT OR SOLO STUDENT	OTHER PILOT OR OTHER STUDENT
1. TOTAL HOURS	3261:00	CP 181:00 SP 203:00
2. HOURS THIS TYPE	1332:00	55:15
3. HOURS THIS MODEL	297:00	18:15
4. HOURS LAST 90 DAYS	64:30	None
5. HOURS LAST 30 DAYS	22:35	None
6. HOURS LAST 24 HOURS	2:45	None
7. ACTUAL COMBAT HOURS	130:00	105:00

Fill in items 8 and 9 only if operator was student in training or rated pilot in CIS, OTU, etc.

8. TRAINEE CLASS NO. AND SCHOOL, OTU, CCTS, ETC.

9. PHASE AND HOURS IN THIS PHASE

PHASE	DUAL OR COPILOT	SOLO OR 1ST PILOT

10. AAF SCHOOLS PREVIOUSLY ATTENDED AND DATES

Randolph Fld, Texas
Primary - 5 Aug to 4 Oct 40

Kelly Fld, Texas
Advanced - 8 Oct to 20 Dec 40

11. INSTRUMENT RATING

TYPE	DATE
Green	17 Mar 48
LAST CHECK STATION	DATE
Inyokern	17 Mar 48

12. Was operator on instruments at time of accident or immediately before?
☐ YES ☒ NO

If answer to number 12 is Yes, or if accident occurred at night or under instrument or unknown conditions, fill in items 13 through 17.

HOURS	1ST PILOT	OTHER
13. TOTAL—INSTRUMENT		
14. INSTRUMENT LAST 6 MOS.		
15. INSTRUMENT LAST 30 DAYS		
16. NIGHT, LAST 6 MOS.		
17. NIGHT, LAST 30 DAYS		

Section E—PERSONNEL INVOLVED (Including operator and all other persons, whether in plane or not)

DUTY AT TIME OF ACCIDENT (1)	NAME (Last Name First) (2)	TYPE OF AERO. RATING (Symbols) (3)	SERIAL NO. (4)	GRADE AND BRANCH OF SERVICE (5)	PERS. CLASS. SYMBOL (AAF Reg. 15-1) (6)	ORG. ASSIGNMENT—AIR FORCE OR COMMAND GROUP NUMBER AND TYPE STATION (7)	FATAL MAJOR MINOR NONE MISSING UNKNOWN (8)	PARACHUTES USED Yes (9)	PARACHUTES USED No (10)	PARACHUTES SUCCESSFUL Yes (11)	PARACHUTES SUCCESSFUL No (12)
P	MADISON, ROBERT M.	P	AO-401195	Capt., USAF		AMC, Project #288, Inyokern, California	None		X		
CP	HESLER, PAUL M.	CP	AO-2056048	1st Lt., USAF			None		X		
E	Burns, David D.	E	AF-36880019	S/Sgt., USAF			None		X		
CE	Rico, Frank A.	CE	AF-11128677	Sgt., USAF			Major		X		
	Simeroth, John W.	None	None	Civilian		Bureau of Standards, Washington, D.C.	None		X		

O. K. FOR FILE
BY

RESTRICTED WHEN ENTRIES ARE MADE HEREON

16—41009

Section F—DAMAGE

Describe briefly the extent of the damage which occurred. (If no damage, write "None." If aircraft is missing, write "Missing." If aircraft was totally wrecked, so state)

1. To Aircraft: Aircraft was ditched causing total wreck. (Sank in approximately 400 feet of water)

2. To Engine	1 Wreck	2 Wreck	3 Wreck	4 Wreck
3. To Propeller	1 Wreck	2 Wreck	3 Wreck	4 Wreck

4. To Private Property (Explain on Attachments): None

Section G—POWER PLANT FAILURE

(Use this section of the form if power plant failure was a contributing cause factor in the accident. This must be signed by engineering officer)

1. Duration of Flight Since Last Take-off: Hours 2 Minutes 45

	(1)	(2)	(3)	(4)
2. Engine Model				
3. Engine No.				
4. Engine-Hours Since Last Major Overhaul				
5. Depot or Sub-depot Performing Overhaul				
6. Total Engine-Hours				
7. Propeller Model				
8. Propeller-Hours Since Major Overhaul				

9. Statement of Operator, if Available, on Behavior of Power Plant and Manipulation of Controls Immediately Before Failure: None

10. Statement of Engineering Officer, Mechanic, and Others as to What Failed and Probable Reasons Why: None

11. Octane Rating of Fuel: 100 Octane

Engineering Officer (Name, Grade, and Station):

Section H—AIRFRAME, LANDING GEAR, OR OTHER MATERIEL

(Use this section if matériel failure was a contributing cause factor in the accident. This must be signed by engineering officer)

1. Describe the Matériel Failure, Including Statement of Kind of Flight at the Time of Failure and All Factors Which Might Have Contributed Toward the Failure: None

Engineering Officer (Name, Grade, and Station):

Section I—SPECIAL EQUIPMENT

(Use this section if special equipment—parachutes, radio, dinghies, oxygen equipment, fire extinguishers, etc.—was a contributing cause factor in the accident for any reason including failure, misuse, or by reason of not being in the plane)

1. Describe How the Special Equipment Contributed to the Accident or to Its Results:

The crew stated there were no first aid kits in either one of the life rafts, only bandages. Also there were no maps of any kind.

16—41089-1

Section J—AIRPORT AND FACILITIES AND AIRWAYS

(Use this section if the airport or its facilities or airways facilities were a contributing factor in the accident, either because of inadequacy, condition, or poor maintenance)

1. EXPLAIN

None

Section K—WEATHER (This must be signed by weather officer of the reporting station)

1. WHAT WAS THE WEATHER AT THE TIME AND PLACE OF THE ACCIDENT?

2. IF WEATHER WAS A FACTOR IN THE ACCIDENT, STATE HOW AND ATTACH COPY OF WEATHER REPORTS

J

WEATHER OFFICER (Name, Grade, and Station) ➡

Section L—GENERAL INFORMATION

1. IF ERROR ON THE PART OF SOMEONE OTHER THAN THE OPERATOR WAS A FACTOR, STATE HOW

None

SEE ATTACHMENT # 1

2. WHAT WAS THE MISSION?

Atmospheric Research #

3. DID FIRE OCCUR UPON CRASHING? [X] YES [ ] NO

4. WERE THERE ANY VIOLATIONS OF ORDERS OR REGULATIONS? (Explain)

AF Regulation 60-16, paragraph 36c. Although there was no written authorization for the aircraft to be flown below the minimum altitudes specified in this regulation, further questioning of the Pilot, co-pilot and Operations Officer revealed that it was standard operating procedure for the scientist who was to be flown to brief the pilots on what he would like done and the pilots would use their own descretion as to the amount of the work that could be safe accomplished. This procedure was necessary due to the varied nature of the tests being accomplished at that installation.

5. DISCIPLINARY ACTION TAKEN OR CONTEMPLATED

Inasmuch as the mission being flown was for the purpose of unusual test work and standard operating procedure was for the pilots involved to follow as closely as possible the desired mission of the scientist being flown, it is not felt that the pilot should be held responsible for violation of AF Regulations.

6. KIND OF CLEARANCE (Attach Form 23)	FROM	TO	OR LOCAL	STATION OF LAST DEPARTURE
Local			Local	Armitage N.A.S.

7. IF UR FORM 54 HAS BEEN SUBMITTED ON ANY FEATURE INVOLVED IN THE ACCIDENT, GIVE UR NO. AND DATE	NO.	DATE

EXPLAIN FULLY AND ATTACH COPY

None Submitted

8. ARE COPIES OF AAF FORMS 1, 1A, ATTACHED HERETO AS REQUIRED BY AAF REGULATION 62-14?	9. ARE PHOTOS ATTACHED?
[X] YES [ ] NO	YES

16—47

ATTACHMENT # 2

SECTION M - DESCRIPTION OF THE ACCIDENT

1. This aircraft was on an atmospheric research mission which entailed flying from the ground to 30,000 feet and return to as low an altitude as possible. The mission was estimated to be of three (3) hours duration. The pilot was considered very proficient in this type aircraft. The aircraft had a take-off weight of 104,556 lbs. and had been airborne two (2) hours and forty-five (45) minutes when the crash occured.

The weather at the time of the accident was high scattered to clear skies with light variable surface winds over the area. The surface wind at 1130 PST at Las Vegas was 11 mph from the ESE. Boulder City did not transmit the 1130 weather but the 1230 weather for Boulder City showed the surface wind to be eight (8) mph from the SSE with the sky condition high scattered and forty (40) miles visibility.

The aircraft had made the minimum altitude run and all runs to 30,000 feet and return. At the time of the accident the aircraft was making the minimum altitude run after return from 30,000 feet. This run was being made in a southernly direction on the portion of Lake Mead, Nevada, that leads to the Virgin River. The aircraft was making good an indicated airspeed of 230 mph at an indicated altitude of 1600 feet. After approximately three (3) minutes at this altitude during which time the civilian scientist, Mr. J. W. Simeroth, was recording his data the aircraft struck the water. In Mr. Simeroth's statement (Exhibit #15) he states that he recorded the altitude as 1600 feet with the Kollsman scale set at 29.92" Hg. The 1130 PST weather sequence for Las Vegas reported a setting of 29.83" Hg. The surface of the water at this time was to quote the crew "As smooth as glass." Immediately upon contact with the water numbers two (2), three (3) and four (4) engines were torn completely off the airplane. The pilot detected a fire in number one (1) engine at this time. All engine fuel shut-off valves were closed immediately. Also a large portion of the skin on the underside of the left wing had been torn off and the left horizontal stabilizer had been badly twisted and torn. An attempt was made to feather number one (1) engine and all throttles were closed.

The airplane skipped and gained approximately 200 to 300 feet after the initial touchdown. The pilot and co-pilot stated their combined efforts were required to hold the aircraft and that it was vibrating excessively. The co-pilot's airspeed was indicating 150 mph when the airplane was felt to stall. At this time the pilot's airspeed was indicating 45 mph so it is believed too much reliability cannot be placed on the co-pilot's indicated airspeed of 150 mph.

On the second touchdown the airplane was in a tail low attitude and the decelleration forces were not very great. The airplane traveled approximately 200 to 300 yards before it stopped and the airplane was afloat for approximately twelve (12) minutes before it sank.

According to the altimeter setting used by the pilot and the altimeter setting at the time of the crash at the nearest AF installation the pilot should have had approximately 300 feet of altitude.

ATTACHMENT # 1

SECTION L - GENERAL INFORMATION

3. A fire occured in #1 engine when the aircraft contacted the water the first time. It was noticed immediately by the pilot and he stated it was rather small. At the same time it was noticed #2, 3 and 4 engines were completely off the aircraft and the engineer closed the fuel shut-off valves to all four engines. It is not known whether the fire went out at this time or was extinguished when the aircraft made its second contact with the water. The second contact was approximately 30 seconds after the initial touchdown.

ATTACHMENT # 11

Statement of Captain R. M. Madison

Took off at 0851 PST, 21 July 1948. We started ascending east and north of Lake Mead, climbing to 30,000 feet. Upon reaching 30,000 feet we descended on headings of south and west until we passed over the north edge of Lake Mead. Started run south to descent down to 1600 feet indicated. From maps we computed altitude of Lake to be below 1200 feet. The water was very calm. Surface was absolutely smooth. I visually estimated altitude at 500 feet above the Lake with an indicated airspeed of approximately 230 mph. We struck the water. The airplane shuttered severely and we were able to lift the airplane off the water for an altitude of approximately 200 feet. In the air we realized #2, 3, and 4 engines had been completely torn off the airplane and #1 engine was on fire. The under side of the wing was thrown off. The left stabilizer was at least partially thrown off. Estimated ditch at about 1135 PST.

We cut fuel off immediately and feathered the #1 engine. My airspeed indicator was out. Co-pilot later advised me our airspeed was 150 indicated and airplane began to stall. I dropped the nose, was able to gain control sufficient to get the nose up just before impact at approximately 150 indicated. The tail struck first, drug in the water for approximately 200-300 yards before the nose made impact. With the first impact of the tail, the co-pilot and myself opened our hatches. There was no time to warn the scanner in the rear. Sgt. Burns went out first through my window. Lt. Hesler followed by Mr. Simeroth immediately went out the co-pilot's window. I went out the pilot's window immediately behind Sgt. Burns and climbed on top of the airplane, ran to the rear section and found the rear escape hatch under approximately six feet of water. After stamping on the top side of the airplane we heard Sgt. Rico from the center of the tunnel calling us for help.

I directed Sgt. Burns to inflate the left raft and Lt. Hesler the right raft and then made my way forward and entered the pilot's window, while the water was at the lower edge of the pilot's hatch.

I made my way to the tunnel and found Sgt. Rico lying on his left side, unable to move with his parachute. I managed to pull him out of the tunnel and carry him to the co-pilot's window. By that time Mr. Simeroth was inside and helping me put Sgt. Rico out the co-pilot's hatch, while Lt. Hesler and Sgt. Burns also assisted putting Sgt. Rico in the raft. There were no first aid kits in the rafts, (only bandages), so Mr. Simeroth, who was still in the airplane, brought out the first aid kit above the navigator's table. The airplane was about ready to submerge. Then Mr. Simeroth got out of the airplane and we immediately tied two rafts together and rowed off and watched it sink. I estimate the airplane floated between 10 and 15 minutes.

Sometime after we spotted a C-47 flying at high altitude. We learned later that the C-47 had advised Las Vegas Airways that a boat appeared in distress so that the TWA air liner taking off shortly after was asked to fly over our position. We sighted TWA DC-3 at approximately 1350 PST. We signaled him with three smoke flares. He circled over our position and reported we were two life rafts in distress. The Lake Mead Boat Co. dispatched a motor launch and picked us up at 1745 PST. We arrived back at Boulder City at approximately 1815 PST. Immediately upon making landing we placed a long distance telephone call to the Duty Officer at Armitage Field. Major Baker took the call and I reported airplane loss, all personnel safe, with Sgt. Rico the only one injured with broken left arm.

Immediately thereafter Sgt. Rico was taken to the Boulder City hospital where a traction splint was applied and morphine administered.

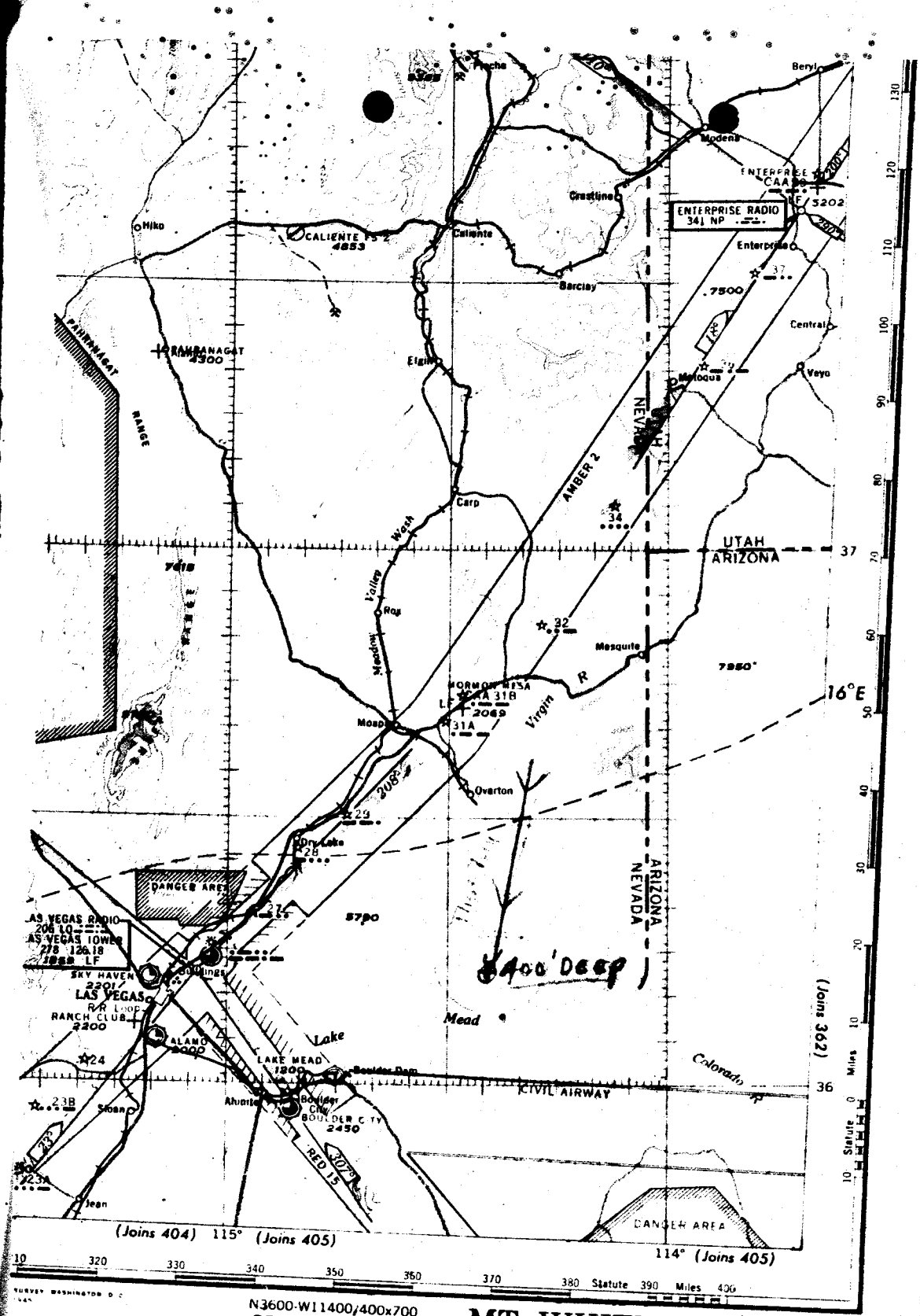
Lt. Comdr. Carr from Armitage Field arrived in Boulder City at approximately 0630 PST, 22 July 1948, in a JRB and brought back all personnel to this station.

I would like to make part of the official records that all personnel aboard conducted themselves courageously. At no time did anyone display any undue excitement.

The purpose of this flight was scientific research. The mission called for flight from as low an altitude as safe to 30,000 feet and descend to low altitude.

Mr. Simeroth, Bureau of Standards, was making light intensity readings with change of altitude.

R. M. MADISON, Captain, A.C.



N3600-W11400/400x700

SCALE 1:1.000.000

First Edition Subject to correction

MT WHITNEY (363)

UNITED STATES