

AVIATION MEDICAL SECTION  
OUTPATIENT CLINIC  
WILLIAM BEAUMONT GENERAL HOSPITAL  
El Paso, Texas

(b) (6)

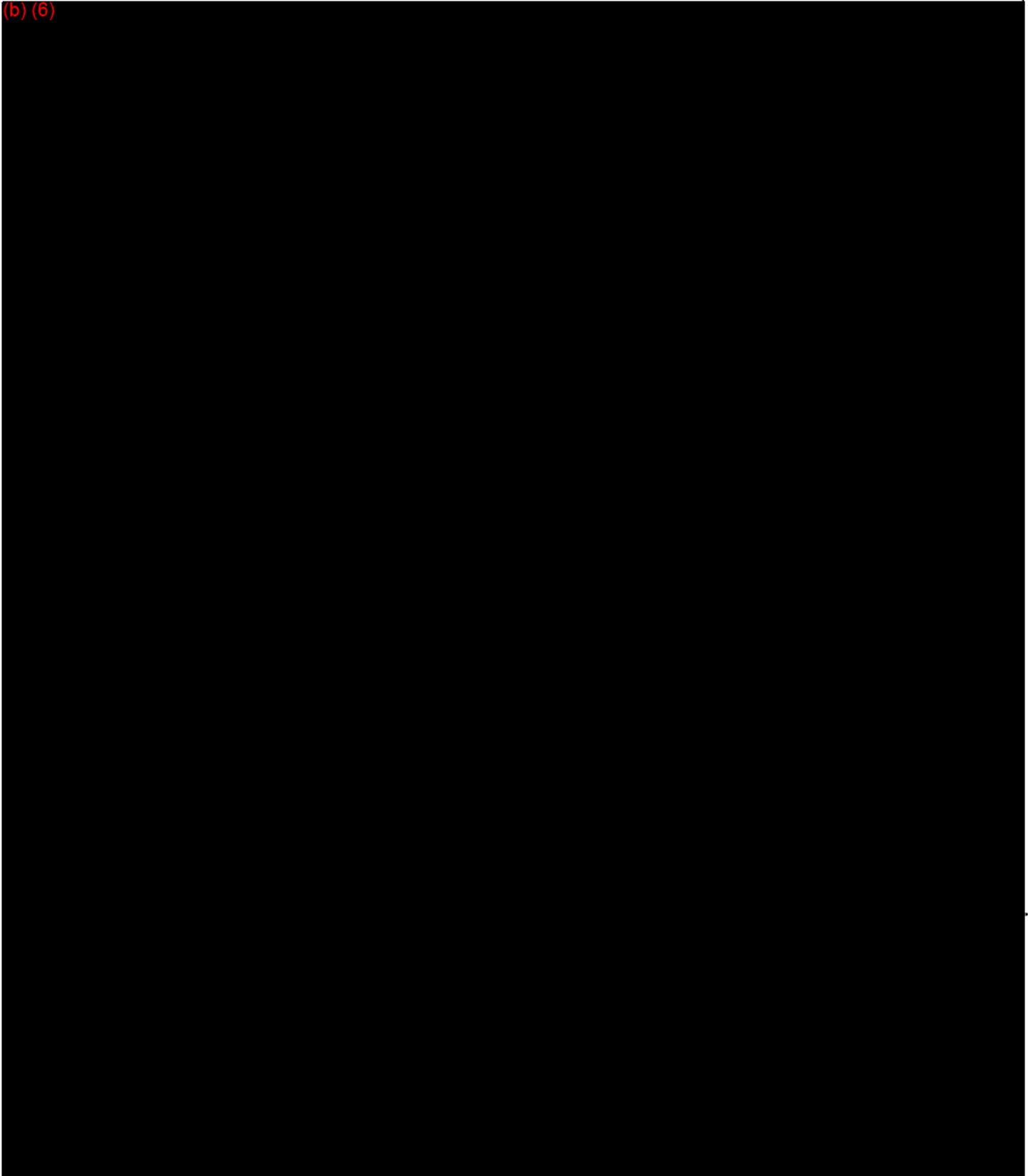
30 December 1960

SUBJECT: 1st Lt. Donald Bales

TO: President  
U. S. Army Board Aviation Accident Research  
Fort Rucker, Alabama

(b) (6)

(b) (6)



(b) (6)



16 February 1960.

S T A T E M E N T

At 1515 hours on 15 February 1960, I started a flight in helicopter 046 to determine the extent of a lateral vibration which had been in the aircraft for several days. I had flown the aircraft twice before for the same purpose starting at 1200 hours.

I took off to the West and turned down wind to the runway. At this time I felt I was getting feedback in the cyclic and collective pitch control. At this point I switched my hands on the controls (left hand on the cyclic and right hand on the collective pitch, on the right side *if you -* *turn left?* controls).

At this point I called the tower and told them I was going to make an approach to the TAM strip, North of A-r. I started a normal approach to the strip at a normal rate of descent and 45 miles an hour. I continued the approach until I was at a point approximately 50 feet above the ground. At this point I thought the aircraft was descending too rapidly so I started to raise the nose and applied power.

At a point approximately 8 feet above the ground, I was in a slightly nose high attitude slowly coming to a hover. I continued to add power and left pedal. I still had some forward motion, but everything looked normal.

At this time I heard a loud noise and felt a jerk in the rear of the aircraft. The aircraft started a turn to the right and seemed to rise 3 to 4 feet. I knew I had damaged the tail rotor so I initiated a hovering autorotation. I also knew I was above normal hovering altitude (8 to 10 feet) so I snapped the pitch down and up quickly and pushed left on the cyclic control.

The aircraft hit very hard, 45 degrees right from the original direction of flight, bounced slightly and came to rest. I shut everything off, got out of the aircraft and walked to Operations to tell them of the accident. I left my passenger, (b) (6), a crew chief, to watch the aircraft.

/s/ Donald G. Bales  
DONALD G. BALES  
1st Lt Arty

16 February 1960

REPORT OF INTERVIEW - LT BALES

Lt. Bales was asked to read over his written statement and then make any additions.

Q. How high were you when you first noticed your approach was bad?

A. At about 50 feet I started adding power to slow forward speed and rate of descent. At about 15 feet I had 26 inches manifold pressure and 3150 RPM. The aircraft shuddered, I was in a slightly nose high attitude.

Q. Did you have your hands reversed on the controls at this time?

A. Yes.

Q. How long have you been changing hands?

A. For about a year. I've made about 100 approaches this way including power recovery autorotations. I've done this to relax while flying and to prove I could fly this way. It also helps me determine if I'm thinking a vibration into the ship or if it is actually there.

SUMMARY OF ADDED STATEMENT

Lt. Bales stated he, at times, thought he was a pretty good pilot in the helicopter. He had done things that were not too smart at times. In this case he was highly irritated at the aircraft because he couldn't find the cause of the lateral vibration. He stated that he was not concentrating too much on the approach. He got behind the aircraft at the last of the approach and never caught up with it.

(b) (6)

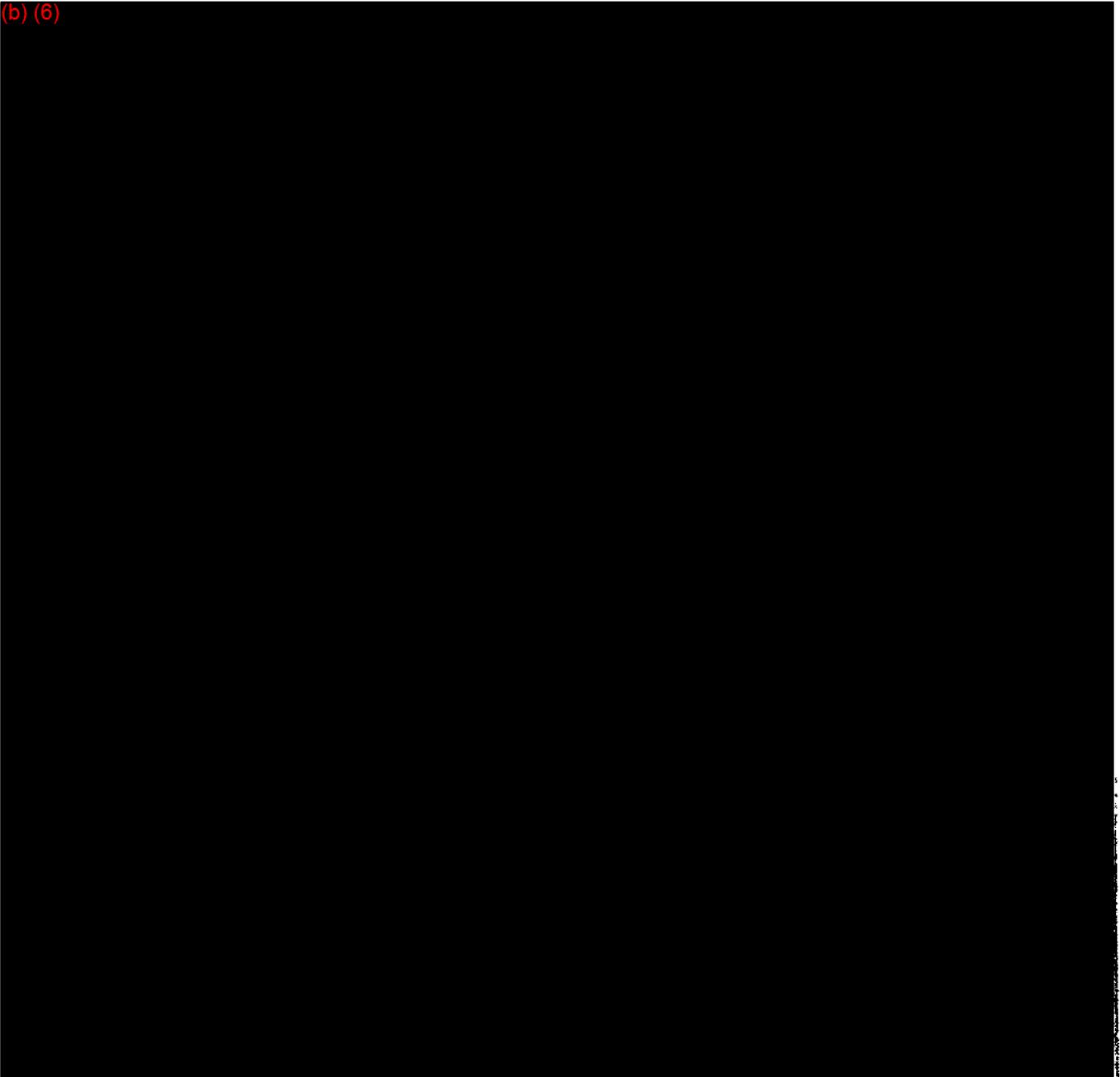
3D LIGHT AVIATION SECTION  
APO 358

Bales, Donald G.  
1st Lt 075142

4 March 1960

COMMANDERS EVALUATION

(b) (6)



3D LIGHT AVIATION SECTION  
APO 358

4 March 1960

SUBJECT: Psychiatric Evaluation

TO: Commanding General  
I Corps (Group)  
APO 358  
ATTN: Aviation Medical Officer

(b) (6)



1 Incl  
Commanders Evaluation

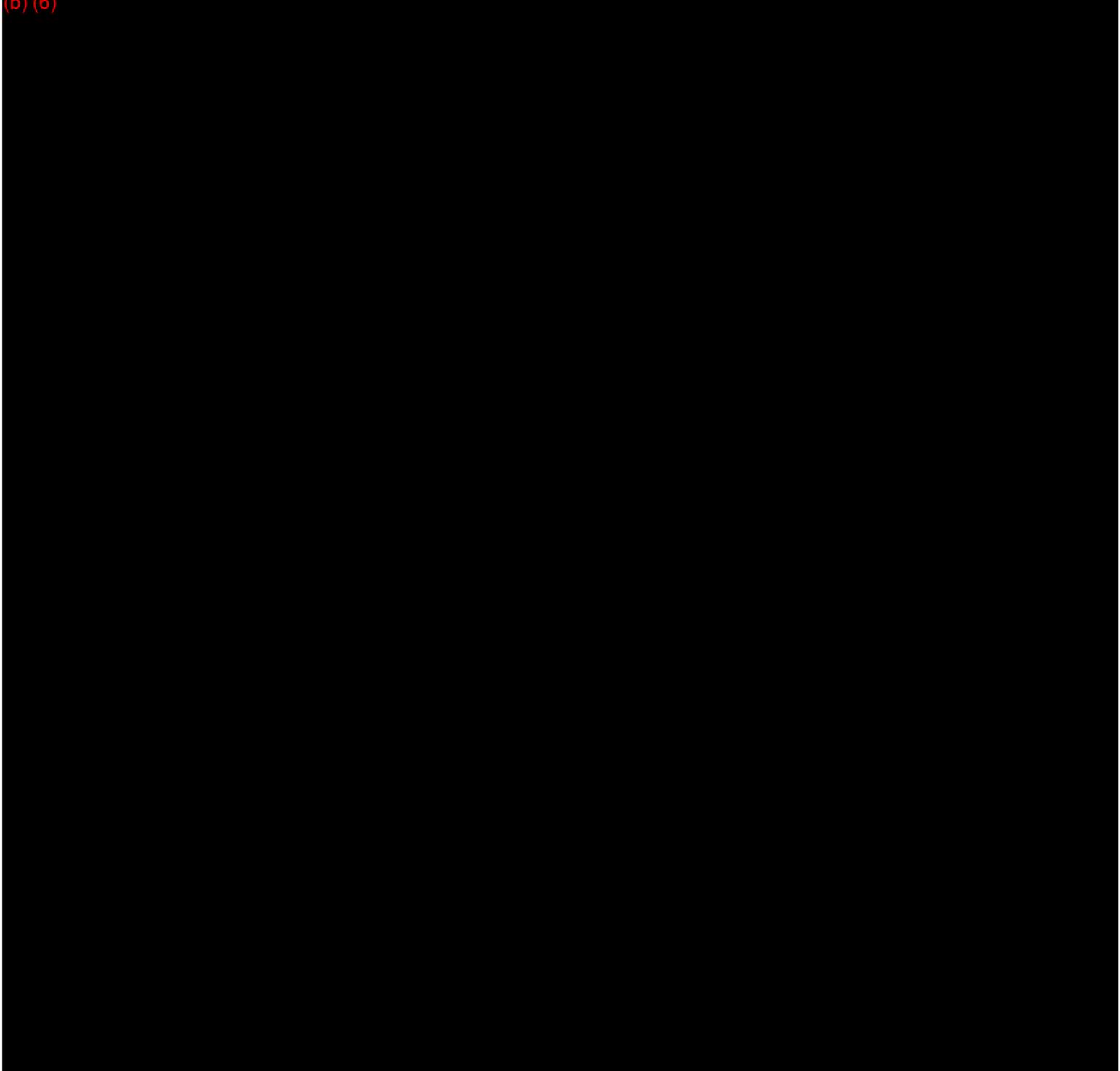
(b) (6)

NEUROPSYCHIATRIC SERVICE  
121ST EVACUATION HOSPITAL (SMBL) (FXD)  
APO 20, San Francisco, California

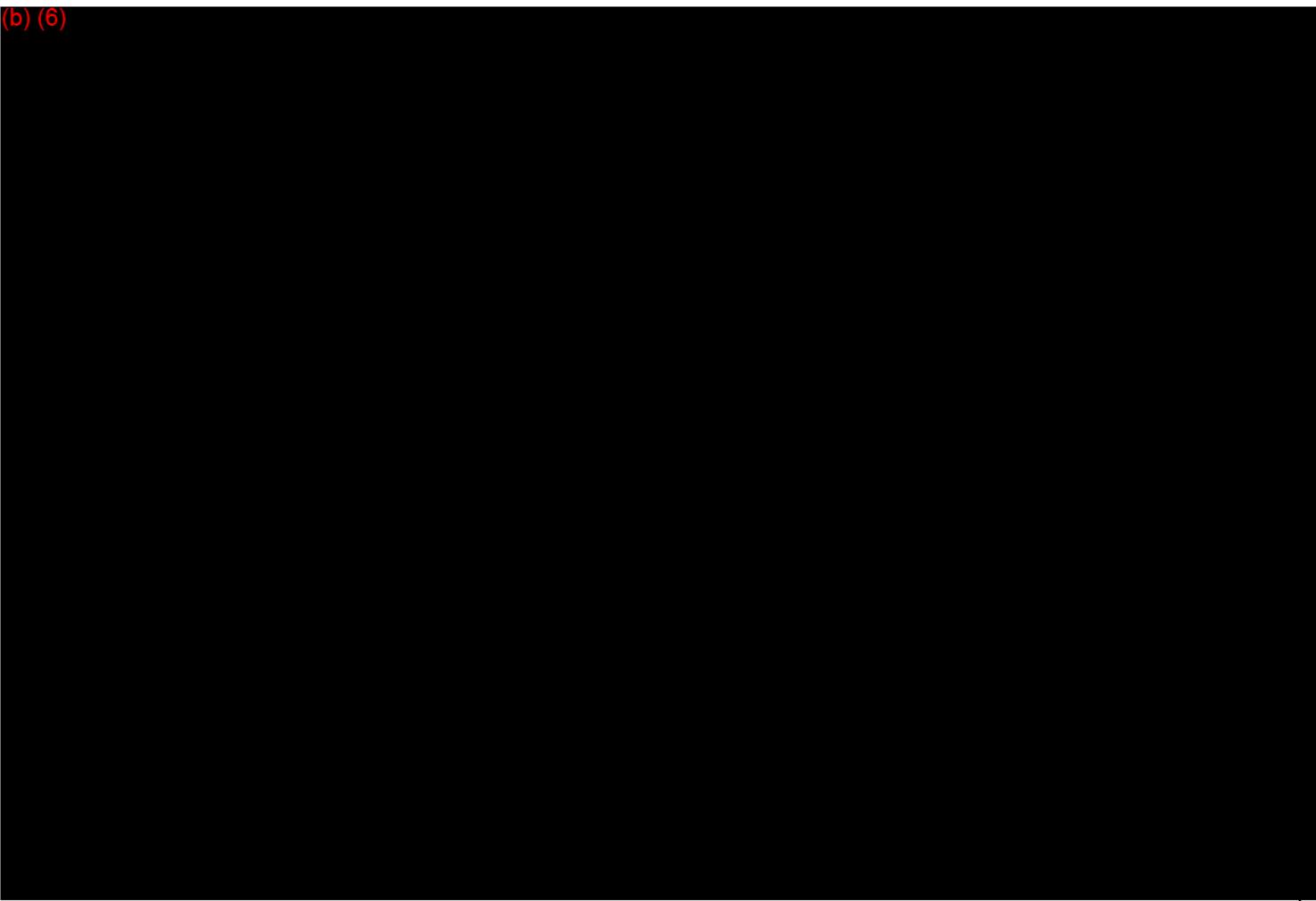
8 March 1960

C E R T I F I C A T E

(b) (6)



(b) (6)



HEADQUARTERS FOURTH UNITED STATES ARMY

FORT SAM HOUSTON, TEXAS

IN REPLY REFER TO:

AKADA-SD

20 FEB 1961

SUBJECT: Army Aircraft Accident Report

TO: Director  
U. S. Army Board for Aviation Accident Research  
Fort Rucker, Alabama

1. The attached accident report involving aircraft L-20A 54-1671, 27 December 1960, Fort Bliss, Texas, is forwarded in compliance with AR 385-40.

2. This headquarters concurs in the findings and recommendations of the Aircraft Accident Investigation Board.

FOR THE COMMANDER: (b) (6)

1 Incl  
as

TRANSCRIPT

SUBJECT: Conversation Between Tri City Radio/Tower Operator and Pilot of L-20, SN 54-41671. (The following is in accordance with the tower operator's memory of the pilot's answers, operator's comments were taped)

1. The initial transcript between aircraft's pilot was faint and only partially understood by tower operator.

Radio: Army Aircraft calling Tri City, go ahead.

Pilot: 41671, 20 Southwest Tri City at 6000 feet and requested local weather (approximate time at this transmission was 0027 EST).

Radio: 4500 scattered, 3 miles and ground fog, visibility to East three-fourths mile.

Pilot: Roger.

Radio: 671, are you landing at Tri City?

Pilot: Roger. For refueling.

Radio: Are you a VFR flight?

Pilot: Roger. (Last pilot transmission heard).

Radio: (After several minutes). 671, this is Tri City tower.

The operator utilizing the tower radio and the omni radio attempted several times to contact the aircraft without success for 5 to 7 minutes.

The first transmission initially heard by the radio operator was rather weak, but the remainder of the aircraft's transmissions were loud and clear. The radio operator requesting if this was a VFR flight is a common habit by him to aircraft intending to land at Tri City on whom he does not have a flight plan. No military flight plans

are sent to civilian airports. In the tower/radio operators opinion, the pilot's voice appeared normal in tone and pronunciation of words with no indication of trouble. Radio/tower operator's experience is 16 years with FAA and three years with military as tower operator. His name is (b)(6)  
(b) [REDACTED].

The tower log displayed that at 0643Z (0143 EST) radio maintenance checked on the instrument let down equipment and found it to be normal.

2. At 0725Z (0225 EST) the radio/tower operator notified the Highway Patrol and county Sheriff of missing aircraft. Around this time he also notified military flight service and later the Bristol Civil Air Patrol.

ACCIDENT (AR 385-40)					REPORTS CONTROL SYMBOL CSGPA-147(RI)			
MAJOR ARMY COMMAND TO: Commanding General, Fourth United States Army			TIME AND DATE OF ACCIDENT		HOUR 0030 EST	DAY 27	MONTH Dec	YEAR 60
REPORTING UNIT, INSTALLATION 101st Abn Div and Ft Campbell, Ft Campbell, Kentucky					2.	TYPE OF ACCIDENT	ON POST	OFF POST
1. EXACT LOCATION OF ACCIDENT 36°25'N 82°13'W					a. ARMY AIRCRAFT	<input checked="" type="checkbox"/>		
OR 11½ SM ESE FROM: <input type="checkbox"/> LIMITS OF <u>Tri-City (Tenn.) Airport</u> MILES-DIRECTION <input checked="" type="checkbox"/> CENTER OF <u>TOWN OR CITY AND STATE</u>					b. ARMY MOTOR VEHICLE	<input type="checkbox"/>		
					c. NON-ARMY MOTOR VEHICLE	<input type="checkbox"/>		
					d. ARMY FIRE	<input type="checkbox"/>		
					e. OTHER	<input type="checkbox"/>		
3. PERSONNEL INVOLVED (Military: Name, Grade, Service Number, Unit Assignment) (Civilian: Name, CS Grade, Job Title, Home Address)					EXTENT OF INJURY			
					FIRST-AID OR NONE	TEMP.	PERM.	IMPAIR.
					AGE			
X Bales, Donald G., 1st Lt, (b) (6) USAADGEN					27			
4. OWNERSHIP			EQUIPMENT OR PROPERTY INVOLVED (Describe aircraft by type, model, series, serial number; structure by size, type of construction; vehicle and other equipment by make, model, year, body type, etc.)		DAMAGES (Estimated)			
X			Army Aircraft, L-29A, 54-1671		\$ 47,200.			
					\$			
					\$			
					\$			
5. DESCRIPTION OF ACCIDENT (In narrative form, everything that is known about the accident. Include events or conditions which led up to the accident, everything that may have contributed to it, and failures of persons or equipment, supervisory failures, unfamiliarity with operation, errors of judgment, and mission. A complete story.)								
<p>The aircraft involved in the accident was Army L-29, serial number 54-1671, piloted by Donald G. Bales, 1st Lt, Arty, (b) (6), the sole occupant of the aircraft. The crash occurred at 36°25'N, 82°13'W, which is 11½ statute miles east southeast of the Tri-City (Tennessee) Airport, at approximately 0030 EST 27 Dec 60. The aircraft flew into a finger-like ridge running due north and south, elevation 2150', crest 15' wide, average angle of slope 45°, covered with trees ranging to a diameter of 10" and maximum height of 50'. The aircraft was totally destroyed and the pilot, Lt Bales, was fatally injured.</p>								
<p>Detailed narrative attached.</p>								
<p>Copies of autopsy are forthcoming as completed.</p>								
<p>USABAAR report of Army aircraft accident L-29A 54-1671 was not available to the Board at the time this report was completed.</p>								
REPORT NO. <b>261</b>		CODE		REPORT RECORDED ON <input type="checkbox"/> DA FORM 348 <input checked="" type="checkbox"/> CROSS REFERENCED WITH 201				
DA FORM 1 APR 53 285								
REPLACES DA FORM 285, 1 JUL 52, WHICH IS OBSOLETE.								

6. DIAGRAM OF ACCIDENT (Indicate vehicles, aircraft, persons, railroad tracks, signs, direction of travel before and after the accident by appropriate symbols. Indicate NORTH by arrow in following circle)

TAB 6

7. ACCIDENT ANALYSIS

a. PRIMARY UNSAFE ACT (And by whom) Piloting of Army aircraft by 1st Lt Donald G. Bales at an insufficient altitude to provide adequate terrain clearance.

b. UNSAFE PHYSICAL CONDITION (Or mechanical or material failure) If any (1) Known marginal VFR weather conditions. (2) Position of the ARC-55 radio control console (TAB H of narrative). (3) Probable hypoxia and/or loss of night vision due to continuous flight at 11,500' MSL. (4) No sectional chart coverage of area of flight and crash.

c. CONTRIBUTING FACTORS (1) Supervisory error on the part of (b) (6), [REDACTED] Clearance Officer for this flight. (2) Supervisory error on the part of (b) (6) Arty, Army Aviation Duty Officer at the Army Aviation Detachment, Biggs AFB on 26 Dec 60. (3) Lack of judgment on the part of the pilot, (cont'd)

B. CORRECTIVE ACTION

a. ACTION TAKEN TO PREVENT FURTHER SIMILAR ACCIDENTS  
None

b. RECOMMENDED FURTHER ACTION (And by whom)  
(b) (5)

9. REPORT PREPARED BY (Supervisor, Investigation Board, etc.)  
(b) (6)

Flight Surgeon Staff Weather Officer

10. STATEMENT OF REVIEWING OFFICIAL (Whether corrective action is considered adequate to prevent recurrence, recommended action by higher authority, etc.)  
1. Concur with findings and recommendations (b) (5)  
(b) (5)

(b) (6)

DATE 13 February 1961

11. APPROVED  
FOR THE COMMANDER:  
(b) (6)

DATE 14 February 1961

DA Form 285 (Cont'd)

ACCIDENT

(AR 365-40)

TO: Commanding General, Fourth United States Army

TIME AND DATE

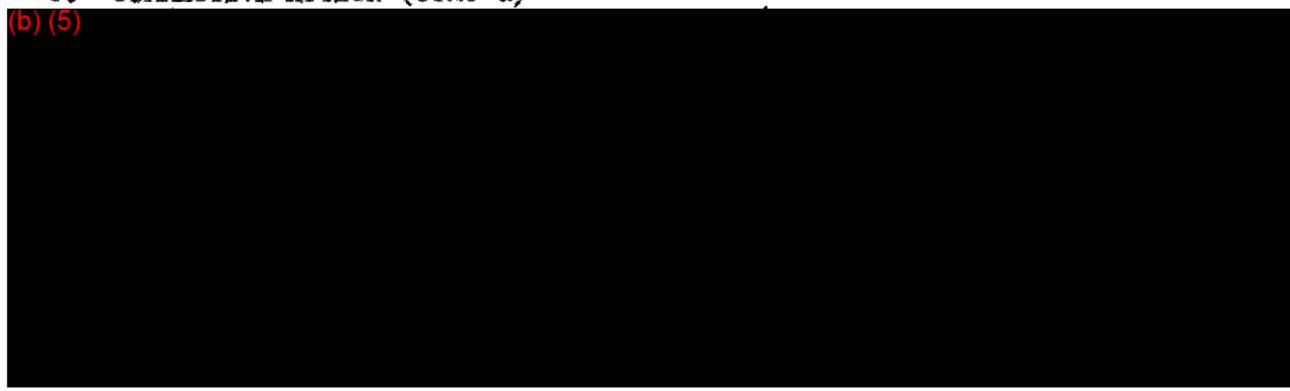
OF ACCIDENT 0030 EST 27 Dec 60

7. ACCIDENT ANALYSIS (Cont'd)

c (3).....Donald G. Bales, 1st Lt, Arty, (b) (6) in undertaking a training flight of this duration into known marginal VFR weather conditions. (See attached narrative for detailed discussion of 7a, b, c)

8. CORRECTIVE ACTION (Cont'd)

(b) (5)



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V

**GENERAL:**

Members of the Aircraft Investigation Board were notified at approximately 2200 hours CST 27 Dec 60 of an Army aircraft accident in the vicinity of Bristol, Tennessee by the Fort Campbell Aviation Office (TAB C).

The Board departed Fort Campbell at 0030 CST 28 Dec 60, arrived Tri-City Airport at 0350 EST 28 Dec 60 and arrived at the scene of the crash at 0730 EST 28 Dec 60.

**IDENTIFICATION:**

The aircraft involved in the accident was an Army L-20A, serial number 54-1671, piloted by Donald G. Bales, 1st Lt, Arty, (b) (6), the sole occupant of the aircraft. The crash occurred at  $36^{\circ} 25' N$ ,  $82^{\circ} 13' W$ , which is  $11\frac{1}{2}$  statute miles east southeast of the Tri-City (Tennessee) Airport, at approximately 0030 EST 27 Dec 60. The aircraft was totally destroyed and the pilot, Lt Bales, was fatally injured. (TAB G)

**DESCRIPTION:**

On 26 Dec 60, 1/Lt Donald G. Bales arrived at the Fort Bliss (Texas) Aviation Section, located at Biggs Air Force Base, El Paso, Texas, at approximately 1030 hours MST. He advised the flight line personnel to ready the L-20 for flight, requested the Operations Sergeant to prepare a flight order (TAB 2a), prepared a DD 175 "Aircraft Clearance" (TAB 2), and had it submitted to Military Flight Service for Notams, weather and clearance (TABS 1a, 1b, 1c).

Military Flight Service, located at Carswell Air Force Base, Texas, received the flight plan for this flight from Biggs Air Force Base Operations and shortly thereafter a weather briefing was given verbally to the pilot (TAB 1d). (See complete weather analysis prepared by (b) (6))  
(b) (6) 1st Lt, USAF, Staff Weather Officer, Fort Campbell, Kentucky, on 10 Jan 61 covering the period of the flight (TAB 3) and the terminal forecast for Tri-City (Tennessee) Airport from 1200 EST 26 Dec 60 to 2400 EST 26 Dec 60 (TAB 3a). Notams from Davisson Army Air Field were read to the pilot for his information. Clearance for the flight was granted by (b) (6)  
(b) (6) who was clearance authority at Carswell Military Flight Service 26 Dec 60 (TAB 1e).

During the above period it was brought to the attention of Lt Bales by both the Army Aviation Duty Officer at Biggs, (b) (6) (TAB 1a) and by the Military Flight Service Weather Forecaster (TAB 1d) that this flight was of unusually long duration. Lt Bales stated to both of the above individuals that he would stop if he became tired. He was further overheard by the Duty Dispatcher at Biggs to state that the flight

would probably take one and a half days due to a probable stop at Tri-City Airport (TAB 1b).

Lt Bales informed the duty dispatcher when the flight plan was being submitted that a one hour passenger and fuel stop would be made at Love Field (TAB 1b), Dallas. However, the DD 175 Aircraft Clearance indicates a fuel stop only (TAB 2). Additionally, Lt Bales instructed the flight personnel to leave the excess parachutes in the aircraft due to a passenger stop at Dallas (TAB 1c).

Flight line personnel pre-flighted the aircraft, performed an engine run-up and refueled all tanks. Additionally, Lt Bales performed a pre-flight, inspected all lights and instruments and performed an engine run-up. Upon completion he stated that everything was working fine. (TAB 1c) No entry of the preflight was made on the DD 781-2 "Aircraft Inspection and Maintenance" form nor was the exceptional release (item #10, DD 781-2) signed by the pilot (TAB E).

Lt Bales departed Biggs Air Force Base in Army L-20A serial number 54-1671 at 1329 EST. His first enroute position report was to Abilene (Texas) Radio reporting over Abilene at 1608 EST at 11,500' MSL. At this time he cancelled his stop at Dallas, Texas and stated that he would stop at Amon Carter Airport, Fort Worth, Texas. The winds aloft over Abilene were given by Abilene Radio to Lt Bales. (TAB 4)

At 1608 EST he reported to Mineral Wells Radio that he was over Mineral Wells, Texas at 11,500' MSL, visual flight rules, destination Washington, D. C. (TAB 4)

Lt Bales landed at Amon Carter Airport, Fort Worth, Texas approximately 1700 EST. The aircraft was refueled by the Allied Fueling Service of Fort Worth, Texas. 117 gallons of 91/96 aviation gasoline and 1 gallon of aviation engine oil were placed in the aircraft. (TAB 5) He departed Amon Carter approximately 1800 EST. (TAB 4)

Contact was made with Dallas Radio over Dallas, Texas at 1815 EST at 9,500'. He received a winds aloft report over Dallas. (TAB 4)

At 2002 EST he reported over Pine Bluff, Arkansas at 11,500' MSL. At this time he received the Little Rock, Arkansas area weather. (TAB 4)

Lt Bales landed at Memphis Municipal Airport at 2050 EST. (TAB 4) The aircraft was refueled with 87.8 gallons of 80/87 octane aviation fuel by Memphis Aero. (TAB 5) A telephonic conversation with (b) (6) of Memphis Aero reveals that Lt Bales ate at the Dobbs House restaurant at the airport. He did not appear to be fatigued. After eating he signed for the delivery of fuel and proceeded directly to the aircraft and

entered the cabin without performing any preflight. (b) (5)

[REDACTED] He departed Memphis airport at 2144 EST. (TAB 1f)

At 2144 EST Lt Bales contacted Memphis Radio informing them of his departure time from Memphis and stating that he was climbing to 11,500' MSL, visual flight rules to Washington, D. C. (TAB 4)

At 2305 EST Lt Bales contacted Nashville, Tennessee Radio, reporting over Nashville at 11,500' MSL visual flight rules to Washington, D. C. He also requested and was given the current weather at Knoxville and Washington. (TAB 4) Washington flash advisory number seven was also given. (TAB 3b)

At 2341 EST Lt Bales contacted Knoxville Radio requesting the Tri-City weather, which he was given. (TAB 4)

He then reported over Knoxville to Knoxville Radio at 2400 EST at 11,500' MSL enroute to Washington, D. C. (TAB 4)

At 0027 EST 27 Dec 60 Lt Bales contacted Tri-City Radio stating that he was "20 southwest" at 6000 and requested the Tri-City weather. He informed the radio that he would be landing at Tri-City and that he was a VFR flight. In addition to the current weather, Tri-City Radio instructed him to contact Tri-City tower when he was "10 out" (TAB 1g). The weather existing at Tri-Cities at this time was: 4500' scattered, 3 miles visibility with ground fog; visibility to the east, three-quarters of a mile. Starting 0032 EST the tower/radio operator made repeated calls Lt Bales on tower frequency 257.8 mcs. and radio frequency 255.4 mcs. with negative contact. At 0143 EST, tower called FAA maintenance to check all instrument letdown facilities which were found to be operating normally. At 0255 EST he advised the Sullivan County Sheriff and Tennessee Highway Patrol of the possibility of a missing aircraft. At 0300 EST, tower received a flight plan on Bales which had been requested at approximately 0100 EST. At 0323 EST, the Bristol Squadron of the Civil Air Patrol was notified. (TAB 1g)

At approximately 0030 EST, (b) (6) [REDACTED] observed an aircraft pass over his house on an approximate heading of 050° or 060° and at an approximate altitude of 800 feet above the ground. (b) (6) [REDACTED] stated that the weather was partly cloudy and that the moon was shining and that there was not much fog, if any. Actual elevation at this point is 1550'. (TAB 1h) (See TAB 6a position number W-3 for location of witness.)

(b) (6) [REDACTED] while driving on Route 19E in the direction of Elizabethton, Tennessee saw an aircraft on a northeasterly heading just miss a ridge west of his position on the highway and pass out of sight over a ridge to the east. (b) (6) [REDACTED] states that the engine was running smoothly and did not seem to be having any trouble. Also the aircraft was flying

a smooth course with no erratic maneuvers. He further states that the weather between Bristol, Virginia and Bluff City, Tennessee, an area north of the crash, was very foggy. However, at the spot where the aircraft was observed "it was a little foggy but no hindrance to driving." Actual elevation at this point is 1750'. (TAB 1i) (TAB 6a Position W-2)

(b) (6) [REDACTED], whose home is approximately one and one-half miles due west of crash site, "heard a plane which sounded very near and very low." He arose from bed, proceeded to the front porch of his home where he still heard the aircraft in flight. Seconds later he heard a crash. "The plane sound like a plane coming for a landing, running smooth or compare with the running of a car downgrade or under no strain or load" stated (b) (6) [REDACTED]. He further stated that "the weather was rather cold, about freezing, wet and very foggy; visibility very poor - about three hundred yards, a few breaks in clouds directly over head." (TAB 1j) (TAB 6a Position W-1)

The crash occurred at approximately 0030 EST 27 Dec 60. The aircraft was in a level attitude at or above normal cruising airspeed. The heading of the aircraft was approximately 060°.

The nature of the terrain at the crash site was as follows: a finger-like ridge running due north and south, elevation 2150', crest 15' wide, average slope 45°, covered with trees ranging to a maximum diameter of 10" and maximum height of 50'. (TAB 6b and TAB 7a, 7b)

Initial contact was with trees 15' downslope from the crest of the hill. (TARS 6c, 6d) The left wing made initial contact with a tree 50' high, shearing off a small portion of the top of the tree. Seventeen feet further on the flight path the engine and propeller sheared a group of three trees 8" in diameter at the 25' level. Simultaneously, the right wing broke a limb of a 5" diameter tree at the 30' level and the left wing struck a 6" diameter tree at the 45 foot level causing one-half of the left aileron and the left tip tank to separate from the wing and proceed upslope 20' where they came to rest on the ground. Twelve feet further, the right wing sheared from the aircraft at the wing root after contacting two 10" diameter trees which were uprooted and showed evidence of contact with the aircraft at the 20' level. Still proceeding on the initial heading for 24' the propeller and engine struck two trees 6" in diameter and 35 feet tall which were uprooted with all impact scars at the four foot level. Initial ground contact occurred 8' further when the right landing gear sheared off and the left gear collapsed upward and rearward. Four feet further, the propeller struck the ground and sheared. Initial ground contact occurred 71' from initial tree strike with the aircraft striking the ground in a 15° angle of descent. Combined with the 35° slope of the hill, this resulted in a 50° angle of impact.

The aircraft slid uphill 12' on its belly striking and uprooting a 6" diameter tree which was 33' high. Scars on this tree extended from the base upwards. The left wing was separated at the wing root at this point.

The aircraft slid 24' further upslope until coming to rest against a 6" diameter tree. The aircraft heading at this final resting place was 015° and listing 20° laterally to the left. (PHOTO C)

The body of the pilot was thrown from the aircraft at some point between initial ground contact and the final resting place of the aircraft. The body was found lying 10' downslope from the wreckage and 5' to left of the flight path with parachute attached. (TAB 6c) (PHOTOS D, E)

The Civil Air Patrol, which had been alerted by Tri-City Tower at 0323 EST 27 Dec 60, initiated a search at daybreak. At 1503 EST 27 Dec 60, a civilian aircraft spotted the wreckage. At approximately 1530 EST, ground units of the Civil Air Patrol and the Kingsport (Tennessee) Rescue Squad arrived at the scene. The CAP roped off the immediate area of the crash site and evacuated the body to a local funeral home. Several hours later security of the site was established by a local Army Reserve unit.

The Accident Investigation Board arrived at the site at 0730 EST 28 Dec 60 and commenced investigation.

#### INVESTIGATION:

Prior to departure from Fort Campbell, the President of the Board coordinated with the Post Aviation Section to secure an officer who would remain at Fort Campbell and effect liaison with Fort Bliss, Flight Service, enroute fuel stops, etc.

The Accident Investigation Board arrived at the Tri-City Airport at 0350 EST 28 Dec 60. A briefing was given to the Board by the Commander of the Bristol, Tennessee Civil Air Patrol (CAP) Squadron, (b) (6) [REDACTED], who had supervised the search for the missing aircraft. CAP personnel who had been among the first to arrive at the crash scene were interviewed at this time. Personal effects of the deceased were inventoried and inspected for anything that would assist in the investigation.

Requests for information on the flight of Army 54-1671 were sent to Military Flight Service and all enroute FAA Flight Service stations through the facilities of Tri-City Flight Service station.

The flight surgeon was dispatched to the local Veteran's Administration hospital to examine the body and to coordinate the accomplishment of an autopsy.

[REDACTED]

At daybreak 28 Dec 60, the president and the two remaining members of the board arrived at the crash site. After a preliminary survey of the site, the president departed for the purpose of securing and interviewing all possible witnesses in the local area. The two remaining board members proceeded to make a thorough analysis of the site to include wreckage distribution diagram, and path of flight and terrain profile diagram.

At 1130 EST 28 Dec 60, representatives from the Signal Photo Laboratory, Quartermaster Petroleum Laboratory, Transportation Aircraft Field Maintenance and the Military Police, all of Fort Campbell, Kentucky, arrived on the scene and performed their particular phase of the investigation.

The Military Police relieved the local Army Reserve unit and assumed responsibility for the security of the crash site.

Due to the rupture of all fuel cells and destruction of all equipment associated with the fuel system, fuel samples were not obtained.

The field maintenance representative inspected all mechanical components of the aircraft to include magnetos, cylinder assemblies, and propeller shaft (b) (5). All components, assemblies and sub-assemblies were determined to be damaged beyond economical repair. (TAB F)

The photographer, at the direction of the board, photographed all pertinent aspects of the crash site. (TAB 7)

After examination of the body, the flight surgeon arrived at the site and performed a crash survival investigation (TAB G).

Assistance was requested from the U.S. Army Board for Aviation Accident Research on 28 Dec 60. On 30 Dec 60, investigation of the crash site was continued by the Investigation Board with the assistance of USABAAR.

Concurrently witnesses were reinterviewed and statements procured by the president of the board and a USABAAR investigator.

The following facts were obtained as a result of the investigation:

a. 1st Lt Donald G. Bales was on an approved flight order to pilot Army L-20A serial number 54-1671 from Fort Bliss, Texas to Fort Belvoir, Virginia on 26 Dec 60. The order authorized five days for the flight. (TAB 2a)

b. Lt Bales did not possess an instrument certificate.

c. Total L-20 time last 6 months: 64.8 hours; total hood or

instrument last 6 months: 8.9 hours; total night time exclusive of date of crash: 4 hours. (TAB D)

d. The pilot received clearance from Military Flight Service for this flight. (TAB 1e)

e. Both the Military Flight Service clearance officer and the duty officer at Biggs Air Force Base questioned the length of the flight. (TABS 1a, 1e) Additionally, the MFS weather forecaster advised Lt Bales against undertaking such a lengthy flight into the existing marginal weather conditions. (TAB 1d)

f. The aircraft was preflighted by both flight line personnel and the pilot, and was found to be ready for flight. (TAB 1c)

g. All position reports indicate the flight was made at 11,500' MSL except for Dallas, Texas at which time he reported at 9,500 feet. (TAB 4)

h. Taking total flight time between point of origin and Memphis, Tennessee of 6 hours, 10 minutes and 194.8 gallons of fuel which the aircraft took on at two fuel stops (TAB 5), results in a consumption rate of 31.5 gallons per hour. Flight time between Memphis and point of impact was 2 hours and 45 minutes which would have resulted in 87 gallons of fuel being used based upon previous consumption rate. All fuel cells were filled at Memphis which results in 138 gallons of usable fuel. Fuel was found in both the engine driven fuel pump and the right wing fuel line. This fuel was insufficient in quantity for POL analysis.

i. Lt Bales departed Fort Bliss, Texas 10 hours and 50 minutes prior to the crash. During that time he had flown 8 hours and 55 minutes.

j. At 0027 EST 27 Dec 60 Tri-City Radio gave Lt Bales the 2359 EST weather which was 4500' scattered, three miles with ground fog, visibility east three-quarters of a mile. (TAB 3)

k. Comparison of altimeter settings at point of departure, enroute fuel stops and at Tri-Cities at the time of the crash indicate the maximum altimeter error due to pressure change could have been a maximum of 130 feet. (TAB 2) 1L

l. Prior to departure from Memphis, no preflight of any sort was performed as witnessed by ground personnel. (TAB 1f)

m. The navigational charts for the Tri-City area found at the scene of the crash consisted of a Jepco Aviation Chart LO 27-28 dated 17 Nov 60. No VFR Sectional Charts for the area east of Dallas, Texas were found either in the aircraft or in the vicinity of the crash. Instrument approach

plates for the Tri-City Airport were not in use but were stored in the Jeppeson carrying case.

n. Analysis of all engine and flight instruments, except the altimeter, under black light (b) (5) [REDACTED] The altimeter face was never found after extensive searching. Omni course selector set at 070°. (TAB 6a)

o. Examination of the engine revealed a sufficient quantity of lubricant. (b) (5) [REDACTED]

p. Close examination of the propeller at point of separation from the drive shaft revealed a straight line shear with minimal torsion. Additionally, long scars running parallel to the span of the blade matched scars on the front of the engine and were made immediately after shearing. (PHOTO C) However, numerous propeller tip slices were found throughout the flight path on trees and branches. From this it is evident that although low engine rpm existed at point of impact with the ground, the propeller was turning upon entry into the trees.

q. Close examination of both seat belt and shoulder harness normally used by the pilot (b) (5) [REDACTED]

[REDACTED] The seat belt and shoulder harness were found unattached to each other but were in proper working order. A one foot difference in length of adjustment of the pilot's shoulder harness was noted.

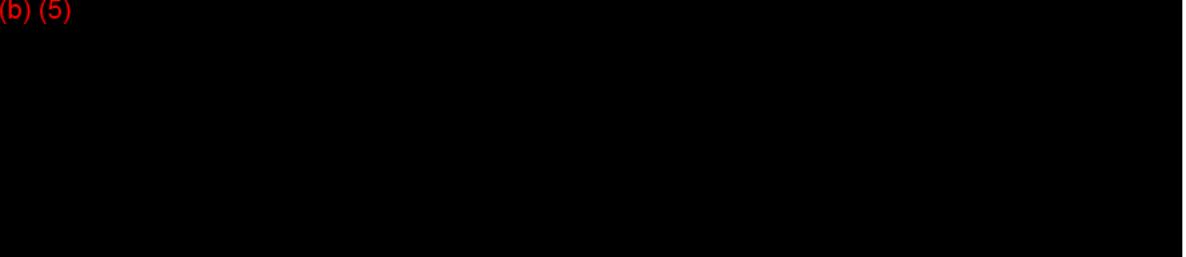
r. The condition of the cabin plus the evident deceleration forces to which the aircraft was subjected results in a determination by the board that this accident was non-survivable. The cabin was collapsed and disintegrated rearward from the engine firewall to the baggage compartment bulkhead. (PHOTO E) The remains of the instrument panel and control column were wrapped around the engine completely torn from the fuselage. (PHOTO H) All instruments, except the engine instruments and the omni course selector, were torn from the panel and were strewn uphill along the flight path of 060° as much as 50 feet. These instruments for the most part were disintegrated. All four doors were torn from the aircraft upon ground impact. All loose baggage (i.e., unused parachutes, first aid kits, suitcase, etc.) were also strewn uphill as far as 100 feet from the final resting place of the aircraft on a heading of 060°.

CAUSE FACTORS:

(b) (5) [REDACTED]

accident. (TAB E)

(b) (5)



c. Crew Performance.

(1) Failure by Lt Bales to adhere to regulations governing the flight of Army aircraft is indicated by the following:

(a) Incomplete DD Form 175 (Flight Clearance). (TAB 2)

(b) Failure to make any entries whatsoever in DD Form 781 series (Aircraft Flight Report and Maintenance Record) in violation of TP AVN 5. (TAB E)

(c) Selection of a cruising altitude of 11,500 feet, which is in violation of AR 95-1, par 29b. (Refer to TAB G for discussion of possible hypoxia.)

(d) Departure from Fort Worth, Texas, a non-scheduled fuel stop, without refiling a flight plan, which is in violation of AR 95-1, par 26e.

(e) Did not perform any preflight inspection after refueling at Memphis, Tennessee. (TAB 1f)

(f) Weather reports indicate overcast conditions prevailed with bases 1500 to 2000 feet and tops at or below 7500 feet beginning midway between Memphis, Tennessee and Nashville, Tennessee and extending eastward along his flight path. AR 95-2, par 11, makes no provisions for VFR on top flights for 3-3 aviators.

(2) From the following facts, it appears that Lt Bales was acting under an unknown compulsion to complete this flight without delay and without due regard for the basic precepts of flight safety.

(a) In his preflight planning, Lt Bales failed to accurately compute his ground speed and estimated time of arrivals. Estimates were in error as much as 2 hours. He failed to obtain adequate VFR navigational charts for his route of flight east of Dallas, Texas.



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(b) In spite of advice from the weather forecaster not to take this flight into the existing weather conditions and when questioned by the clearance officer and the duty officer about the feasibility of a 19 hour flight, he still elected to undertake the flight.

(c) Lt Bales selected a cruising altitude of 11,500 feet in order to take advantage of favorable winds. It is probable that Lt Bales was subjected to the effects of hypoxia at the time of the crash. (TAB G)

(d) Lt Bales failed to perform any preflight inspection at Memphis, Tennessee.

(e) Lt Bales elected to continue his flight eastward from Memphis into known marginal VFR flight conditions.

d. Training. A review of Lt Bales' flight records for the six month period preceding the accident indicates that adequate local unit training had been accomplished to render him proficient in the L-20 type aircraft. Lt Bales, however, was a non-instrument rated aviator. (b) (5)

[REDACTED]

e. Supervision. AR 95-1, par 25b states in part: "Marginal weather. The appropriate responsible clearing authority or duly authorized representative may refuse clearance for a flight by any pilot not holding an appropriate instrument card when in the opinion of the clearing authority weather exists or may exist along the proposed route which would make the successful completion of the flight questionable."

(b) (6) USAF, duty forecaster at Carswell Military Flight Service Center, while giving the weather briefing to Lt Bales for this flight, stated, "that the leg from Memphis to Tri-City Airport would be marginal VFR conditions due to low ceilings and fog. He was advised that if VFR flight could not be maintained his best alternate would be to return westward to Nashville or Memphis." (b) (6) further advised Lt Bales "that instrument or very marginal VFR conditions would prevail throughout the area from Tri-City airport to Davisson Army Air Field for the rest of the night." He then told Lt Bales, "I would not make this lengthy flight into these weather conditions."

In view of the above, the board concurs that (b) (6)  
(b) (6), clearance authority at Carswell Military Flight Service Center, committed supervisory error in clearing the flight of Army 54-1671 as submitted by Lt Bales. (b) (5)

[REDACTED]

[REDACTED]

(b) (5)

[REDACTED]

[REDACTED]

(b) (5)



f. Administration. Due to the difficulty of coordination and time limitation imposed on accident investigation board, the Standard Operating Procedures for Army Aviation Activities at Fort Bliss, Texas were not available for the perusal of the board. (b) (5)  




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RECORDED & INDEXED BY J. L. PEARCE - 59

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JOINT MESSAGEFORM

UNCLASSIFIED

STORY OR CEN RESERVED FOR COMMUNICATON CENTER

ACTION INFO	PRECEDENCE ROUTINE	TYPE MSG		INFO REFERENCE	CLASSIFICATION OR REFERENCE
		TYPE	NAME		
FROM	CG 101STABNDIV FT CAMPBELL FT CAMPBELL KY	X	DR		
SPECIAL INSTRUCTIONS					
INFO COPIES TO:					
TO	CHIEF OF STAFF USA WASH DC DIR ARAVNSAFETYBD FTRUCKER ALA CG USATHREE FT MCPHERSON GA DIR NAV SAFETY CGN MAS NOR VA DIR FLTSAFETY RSCN MORTON AFB CALIF DIR CORNELL AVN CRASH INJ RSCN SKYHARBOR APT PHOENIX ARIZ COMDR MAAMA OLMSTED AFB PA CG USAAD CGN FT BLISS TEX CG USATW FT GEORGE MEADE MD CG USAFOUR FT SAM HOUSTON TEX	C/S 01 G3 Post Trans Post Saf Dir COMBACK COPY: A&D O			
UNCLAS FROM AJCOG-F					
THIS IS A SUPPLEMENTAL CRASH FACTS MSG, ARMY ACFT ACCIDENT					
RCS CSGPA-459-					
1. REP CRASH FACTS MSG AJCOG-F 1833, 27 DEC 60, RELATIVE MAJOR ACCIDENT L-20A, 54-1671.					
2. SHOULDER HARNESS AND SEAT BELT NOT USED.					
3. AIRCRAFT CRASHED INTO A RIDGE WHILE DESCENDING WITH POWER.					
4. WEATHER A FACTOR- POOR VISIBILITY IN FOG. POSSIBLE IPB CONDITIONS.					
5. NO SUSPECTED MAINTENANCE OR INSPECTION ERROR, MATERIAL FAILURE, OR MALFUNCTION.					
(b) (6)					
DATE 12 MONTH JAN YEAR 61					

HEADQUARTERS  
101ST AIRBORNE DIVISION AND FORT CAMPBELL  
Fort Campbell, Kentucky

LO 1-61

jhs  
12 January 1961

SUBJECT: Orders

TO: Personnel Concerned

1. VOOG 27 Dec 60 cfm as fol: FMO org incd are apt Bd of Off to inves circumstances involving L-20 accident 54-1671, 27 Dec 60 at Tri-City Tenn UP AR 385-40 as ch and Cir 385-5 HQ Third USA.

(b) (6)



2. SDP 6 LO 11-62 this HQ 16 Nov 60 apt off members and custodians of the 101st Abn Div Consolidated Chaplains' Fund is amended to add as member: CHAP (b) (6) 101st Abn Div Spt Gp.

3. SDP LO 12-54 this HQ 15 Dec 60 apt off members of the Ft Campbell Post Billeting Fund Council Ft Campbell Ky is amended as fol:

TO DELETE: (b) (6) INF HQ and HQ Co USAGAR

TO ADD: (b) (6) ARTY HQ and HQ Co USAGAR (Treasurer)

4. SDP 1 LO 8-45 this HQ 8 Aug 60 apt off Bd of Off to inves circumstances involving accidents to Army acft pertaining to the Primary Bd is amended as fol: VOOG 3 Jan 61 cfm as fol: To Add: (b) (6)  
(b) (6) INF 101st Avn Co (Abn Div)

TO DELETE: (b) (6)



FOR THE COMMANDER:

(b) (6)

DISTRIBUTION:

E



INDIVIDUAL FLIGHT RECORD—ARMY AVIATOR (AR 95-64)									1. PERIOD COVERED JULY 1960		2. SHEET NO. 19					
3. LAST NAME—FIRST NAME—MIDDLE INITIAL BALES, DONALD G.						4. SERVICE NO. (b) (6)			5. GRADE AND COMPONENT 1/LT RA			6. Active Duty <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				
6. ORIGINAL RATING AND DATE ARAV 11 APRIL 1957				7. PRESENT RATING AND DATE ARAV 11 APRIL 1957					8. TYPE INSTRUMENT CERTIFICATE NONE							
9. ORIGINATING ORGANIZATION AND STATION 3D LIGHT AVIATION SECTION APO 358						10. SIGNATURE AND TYPED NAME AND GRADE OF OPERATIONS OFFICER (b) (6) (b) (6)										
SECTION I—RECORD OF FLYING TIME																
DATE	AIRCRAFT TYPE MODEL SERIES	MISSION SYM	NUMBER OF LANDINGS	INSTRU- CTOR PILOT	FIRST PILOT	FIRST PILOT FLYING TIME				COPILOT FLYING TIME				CROSS COUNTRY FROM—TO		
						DAY		NIGHT		HOOD	CO- PILOT	DAY			NIGHT	
a	b	c	d	e	f	g	h	i	j			k	l	m	n	o
12	L-19A	T	'10		1.8	1.8										
13	L-19A	S	2		1.3	1.3										A4, K4, A4
18	L-19A	S	18		4.1	4.1										
19	L-20A	S	2		1.0	1.0										
20	L-19A	S	10		2.3	2.3										
21	H-13H	S	'10		2.0	2.0										
22	L-20A	S	4		1.6	1.6										
22	H-13H	S	4		1.0	1.0										
23	H-13H	S	2		1.3	1.3										
23	L-19A	S	4		2.0	2.0										A4, A6, K16, A4
26	L-19A	S	2		.7	.7										
27	L-19A	S	8		1.7	1.7										
28	L-19A	S	2		.8	.8										
28	H-13E	S	6		1.3	1.3										
28	L-20A	S	3				0									
29	L-19A	S	2		.8	.8										
30	L-23D	S	1									2.2	2.2			A18, DG
30	L-19A	S	1		.7	.7										DG, A1
30	L-19A	S	0		1.3	1.3										
																JT E.T. 20
																JT 1M. 28
																SS .VA. 28
																JT VIB. 28
																AO3
																AO4
11.	TOTALS THIS SHEET			30	26	26						31	1	2 (20F)		
12.	TOTALS BROUGHT FORWARD FROM SHEET NO. 18			664	549	1	52	62	26	25	1					
13.	TOTALS TO DATE			690	575	1	51	62	29	26	3					

## SECTION II—SUMMARY OF PILOT EXPERIENCE

DUTY	SINGLE ENGINE b	MULTIENGINE c	HELICOPTER d	OTHER e	TOTAL f
14. INSTRUCTOR PILOT					
15. FIRST PILOT	368		318	4 (Jet)	690
16. COPILOT	25	2	2		29
17. MIL STUDENT PILOT	184				184
18. CIVILIAN PILOT					
19. FOREIGN MIL PILOT					
20. TOTAL PILOT TIME	577	2	320	4	903
21. PILOT COMBAT TIME (Included in above totals)					

## SECTION III—SYNTHETIC INSTRUMENT TRAINER

SECTION IV—ARMY AIRCRAFT IN WHICH CURRENTLY QUALIFIED  
(Includes check rides, transition, or other qualification training)

DATE	TYPE b	TIME c	ACFT TYPE MODEL SERIES	DATE b
			L-19A,D,E	11 APR 57
			H-23B,C,D	23 MAY 58
			H-13D,E,G,H	18 JUN 58
			L-20A	15 FEB 59
30 1-50	0	00 00		00 00
30 1-51	1	00 00		00 00
30 1-52	2	00 00		00 00
33 1-50	TOTAL THIS SHEET	0	00 00	
33 1-50	TOTAL BROUGHT FORWARD 30 1-50 FROM SHEET NO.	18	37	
33 1-50	TOTAL TO DATE	37		

25. REMARKS (Includes suspensions and restrictions, violations, accidents, statement of compliance)

33 1-50 July 1960, sheet closed aircraft accident, L-19A, Major, Pilot enroute from Brady AFB to Japan to A-1, Pusan Korea. Pilot parachuted from aircraft approximately ten miles south of Pusan when aircraft engine failed in flight."

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WPA 1-50

INDIVIDUAL FLIGHT RECORD—ARMY AVIATOR (AR 95-64)										1. PERIOD COVERED AUGUST 1960			2. SHEET NO. 20			
3. LAST NAME—FIRST NAME—MIDDLE INITIAL <b>BALES, DONALD G.</b>								4. SERVICE NO. <b>(b) (6)</b>			5. GRADE AND COMPONENT <b>1/LT RA</b>			6. Active Duty <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
6. ORIGINAL RATING AND DATE <b>ARAV 11 APRIL 1957</b>				7. PRESENT RATING AND DATE <b>ARAV 11 APRIL 1957</b>				8. TYPE INSTRUMENT CERTIFICATE <b>NONE</b>								
9. ORIGINATING ORGANIZATION AND STATION <b>3D LIGHT AVIATION SECTION APO 358</b>								10. SIGNATURE AND TYPED NAME AND GRADE OF OPERATIONS OFFICER <b>(b) (6)</b>								
SECTION I—RECORD OF FLYING TIME																
DATE	AIRCRAFT TYPE MODEL SERIES	MISSION SYM.	NUM- BER OF LAND- INGS	INSTRU- CTOR PILOT	FIRST PILOT FLYING TIME				COPilot FLYING TIME				CROSS COUNTRY FROM—TO			
					DAY		NIGHT		HOOD	CO- PILOT	DAY					NIGHT
a	b	c	d	e	f	g	h	i			j	k	l	m	n	o
1	H-13E	S	2		1.0	1.0										
1	H-19A	S	8		1.5	1.5										
2	L-19A	S	1		1.0	1.0										
3	H-13H	S	9		2.3	2.3										
4	H-13H	S	10		2.3	2.3										
5	L-19A	S	3		2.3	2.3										<b>A4,A6,K16,A4</b>
5	L-19A	S	2		.8	.8										
5	H-13H	S	4		1.0	1.0										
6	L-19A	S	1		2.0	2.0										<b>A4,DMZ,A4</b>
8	H-13H	S	10		2.3	2.3										
9	L-19A	S	3		2.8	2.8										<b>A4,AE98,K16,A4</b>
9	L-19A	S	2		.5	.5										
10	H-13E	S	12		2.0	2.0										
12	H-13E	S	6		.5	.5										
13	L-19A	S	2		.8	.8										
13	L-20A	S	6		1.3	1.3										
15	H-13E	S	4		1.2	1.2										
16	H-13H	S	4		1.0	1.0										
17	L-20A	S	2		.8	.8										
17	H-13E	S	4		.5	.5										
18	H-13H	S	9		1.3	1.3										<b>12 JUL 60</b>
18	L-19A	S	2		.8	.8										
19	H-13H	S	3		.5	.5										<b>18 JUL 60</b>
19	L-19A	S	8		2.0	2.0										
19	L-20A	S	1		1.0	1.0										<b>25 JUL 60</b>
20	L-19A	S	2		.8	.8										
20	L-19A	S	1		2.0	2.0										<b>A4,DMZ,A4</b>
22	H-13E	S	12		2.5	2.5										
24	H-13H	S	13		2.0	2.0										
25	H-13H	S	1		2.3	1.8			.5							
26	L-20A	T	6		1.0						1.0	1.5	1.5			
27	H-13E	S	4		1.3	1.3										
28	L-20A	T	1													
29	H-13E	T	18		.8	.8										<b>32J</b>
30	L-19A	S	4		1.0	1.0										
30	H-13H	S	6		1.5	1.5										
31	H-13H	S	4		.3	.3										
31	L-20A	S	4		1.8						1.8					<b>12 AUG 60</b>
11.	TOTALS THIS SHEET					51	47		1		3	242	2	73	(10P)	
12.	TOTALS BROUGHT FORWARD FROM SHEET NO. 19					690	575	1	52		62	29	26	3		
13.	TOTALS TO DATE					741	622	1	53		65	31	28	3		

## SECTION II - SUMMARY OF PILOT EXPERIENCE

OUTY	SINGLE ENGINE	MULTIENGINE	HELICOPTER	OTHER	TOTAL
14 INSTRUCTOR PILOT					
15 FIRST PILOT	392	1	345	4 (Jet)	741
16 COPILOT	27	2	2		31
17 MIL STUDENT PILOT	184				184
18 CIVILIAN PILOT					
19 FOREIGN MIL PILOT					
20 TOTAL PILOT TIME	603	2	347	4	956
21 PILOT-COMBAT TIME (Included in above totals)					

## SECTION III - SYNTHETIC INSTRUMENT TRAINER

SECTION IV - ARMY AIRCRAFT IN WHICH CURRENTLY QUALIFIED  
(Includes check rides, transition, or other qualification training)

DATE	TYPE	TIME	ACFT TYPE MODEL SERIES	DATE
	L-10		L-10A,D,E	11 APR 57
	H-23		H-23B,C,D	23 MAY 58
	H-13		H-13D,E,G,H	18 JUN 58
	L-20		L-20A	15 FEB 59
22 TOTAL THIS SHEET		0		
23 TOTAL BROUGHT FORWARD FROM SHEET NO. 19		37		
24 TOTAL TO DATE		37		VS 5-21-59

25 REMARKS (Includes suspensions and restrictions, violations, accidents, statement of compliance)

Q T-1 1 1 T°C T°C  
 Q T-1 2 4 T°C T°C  
 Q T-1 3 5 T°C T°C  
 Q T-1 4 3 T°C T°C  
 Q T-1 5 10 T°C T°C  
 Q T-1 6 8 T°C T°C  
 Q T-1 7 8 T°C T°C  
 Q T-1 8 8 T°C T°C  
 Q T-1 9 8 T°C T°C

VS 5-21-59

VS 5-21-59

A TRUE COPY

(b) (6)

CLICK

VIA FAX

VIA FAX

FAX

DATE DATED

OCT 2003

TFL BY

NO. 1000

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INDIVIDUAL FLIGHT RECORD—ARMY AVIATOR (AR 95-64)								1 PERIOD COVERED SEPTEMBER 1960		2 SHEET NO 21							
3 LAST NAME—FIRST NAME—MIDDLE INITIAL <b>BALES, DONALD G.</b>					4 SERVICE NO <b>(b) (6)</b>		5 GRADE AND COMPONENT <b>1/LT RA</b>		6. ORIGINAL RATING AND DATE <b>ARAV 11 APRIL 1957</b>		7. PRESENT RATING AND DATE <b>ARAV 11 APRIL 1957</b>		8. TYPE INSTRUMENT CERTIFICATE <b>NONE</b>				
9. ORIGINATING ORGANIZATION AND STATION <b>3D LIGHT AVIATION SECTION APO 358</b>					10. SIGNATURE AND TYPED NAME AND GRADE OF OPERATIONS OFFICER <b>(b) (6)</b>												
SECTION I—RECORD OF FLYING TIME																	
DATE	AIR-CRAFT MODEL SERIES	MISSION SYM	NUM-BER OF LANDINGS	INSTRU- CTOR PILOT	FIRST PILOT FLYING TIME						COPILOT FLYING TIME						CROSS COUNTRY FROM—TO
					DAY		NIGHT		HOOD	DAY		NIGHT					
					VFR	WEATHER INST	VFP	WEATHER INST		VFR	WEATHER INST	VFP	WEATHER INST				
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	
1	L-19A	S	2		.8	.8											
2	L-19A	S	7		2.0	2.0											
6	L-19A	S	2		.8	.8											
7	H-13E	S	6		1.8	1.8											
8	H-13E	S	11		2.0	2.0											
9	L-20A	S	1		1.1	.1											
10	L-19A	S	2		.8	.8											
10	H-13E	S	6		1.0	1.0											
12	H-13H	S	7		1.8	1.8											
12	H-13E	S	1		.3	.3											
13	H-13E	S	2		.3	.3											
13	H-13H	S	4		1.0	1.0											
14	H-13E	S	6	JL	1.0	1.0											
14	L-19A	S	2		.5	.5											
15	L-19A	S	5		2.5	2.5	L									A4, AE22, AE98, A4	
15	L-20A	S	2		1.1	.1											
15	H-13H	S	3		.5	.5											
16	H-13E	S	36		4.0	4.0											
17	L-20A	S	8		1.8	.8											
19	L-20A	T	2		1.1	.1											
19	L-19A	S	5		2.5	2.5										A4, AE22, AE98, A4	
20	H-13E	S	6		1.8	1.8											
20	L-19A	S	1		2.0	2.0										A4, DMZ, A4	
21	L-20A	T	2		.8	.1											
23	H-13H	S	5		1.0	1.0											
23	H-13E	T	8		.3	.3											
26	L-19A	S	1		1.3	1.3										A4, DMZ, A4	
27	L-19A	S	1		1.3	1.3										A4, DMZ, A4	
28	L-20A	T	2		.9	.1											
28	L-20A	S	4		.8	.8											
29	H-13E	S	4		1.3	1.3											
29	L-19A	S	4		2.3	2.3										A4, AE22, AE98, A4	
30	L-20A	S	1		.5	.5											
11. TOTALS THIS SHEET																	
12. TOTALS BROUGHT FORWARD FROM SHEET NO 20					741	622	1	53			65	31	28	3			
13. TOTALS TO DATE					784	659	1	53			71	31	28	3			

**SECTION II—SUMMARY OF PILOT EXPERIENCE**

SECTION II—SUMMARY OF PILOT EXPERIENCE					
DUTY	SINGLE ENGINE	MULTIENGINE	HELICOPTER	OTHER	TOTAL
14 INSTRUCTOR PILOT					
15 FIRST PILOT	417		363	4 (Jet)	784
16 COPILOT	27	2	2		31
17 MIL STUDENT PILOT	184				184
18 CIVILIAN PILOT					
19 FOREIGN MIL PILOT					
20 TOTAL PILOT TIME	628	2	365	4	999
21 PILOT COMBAT TIME (Included in above totals)					

### **SECTION III—SYNTHETIC-INSTRUMENT TRAINER**

**SECTION IV—ARMY AIRCRAFT IN WHICH CURRENTLY QUALIFIED**  
*(Includes check rides, transition, or other qualification training)*

DATE	TYPE	TIME	ACFT TYPE MODEL SERIES	DATE
19-07-57			L-19A,D,E	11 APR 57
20-07-57			H-23B,C,D	23 MAY 58
21-07-57			H-13D,E,G,H	18 JUN 58
22-07-57			L-20A	15 FEB 59
23-07-57				
24-07-57				
25-07-57				
26-07-57				
27-07-57				
28-07-57				
29-07-57				
30-07-57				
31-07-57				
32-07-57	TOTAL THIS SHEET	0		
33-07-57	TOTAL BROUGHT FORWARD FROM SHEET NO. 20	37		
34-07-57	TOTAL TO DATE	37		

25. REMARKS (Includes suspensions and restrictions, violations, accidents, statement of compliance)

(6)

(b) (6)

5. 1. 1878. VIII.

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2222-<sup>3</sup>, M., "

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DEZ. 19. 1980

**INDIVIDUAL FLIGHT RECORD—ARMY AVIATOR**  
(AR 95-64)

1 PERIOD COVERED  
OCTOBER 1960

2 SHEET NO  
22

3. LAST NAME—FIRST NAME—MIDDLE INITIAL  
**BALES, DONALD G.**

4. SERVICE NO  
**(b) (6)**

5. GRADE AND COMPONENT  
**1/LT RA**

Active Duty  
 YES  NO

6. ORIGINAL RATING AND DATE  
**ARAV 11 APRIL 1957**

7. PRESENT RATING AND DATE

**ARAV 11 APRIL 1957**

8. TYPE INSTRUMENT CERTIFICATE  
**NONE**

9. ORIGINATING ORGANIZATION AND STATION  
**3D LIGHT AVIATION SECTION  
APO 358**

10. SIGNATURE AND TYPED NAME AND GRADE OF OPERATIONS OFFICER

**(b) (6)**

**SECTION I—RECORD OF FLYING TIME**

DATE	AIR-CRAFT TYPE MODEL SERIES	MISSION SYM	NUM- BER OF LAND- INGS	INSTRU- CTOR PILOT	FIRST PILOT FLYING TIME				HOOD	CO- PILOT	COPILOT FLYING TIME				CROSS COUNTRY FROM—TO			
					DAY		NIGHT				DAY		NIGHT					
					VFR	WEATHER INST	VFR	WEATHER INST			VFR	WEATHER INST	VFR	WEATHER INST				
11-6-60	L-19A	S	2	d	1.6	1.7	1.4	1.5	-	-	1.6	1.7	1.4	1.5	q			
11-1-61	L-19A	S	1	c	1.7	1.8	1.5	1.6	1.7	1.8	1.6	1.7	1.5	1.6	1.7			
11-1-61	L-19A	S	1	c	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
11-1-61	H-13H	S	2	c	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3			
11-1-61	H-13H	S	6	f	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3			
11-1-61	L-19A	S	5	c	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1			
11-1-61	L-19A	S	3	c	2.0		2.0									A4,K6,A33,A4		
11-1-61	L-19A	S	6	c	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3			
11-1-61	L-20A	S	1	c	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8			
11-1-61	H-13H	S	6	c	1.0	.5	.5	.5										
11-1-61	H-13H	S	5	c	.5	.5	.5	.5										
11-1-61	L-20A	S	5	c	1.5	1.5										A4,A34,A4		
11-1-61	H-13H	S	4	c	1.0	1.0												
11-1-61	L-20A	S	7	c	2.0	2.0												
11-1-61	L-19A	S	4	c	2.5	2.5										A4, AE22, AE98, A4		
11-1-61	L-20A	S	1	c	1.7	1.7										A4, DMZ, A4		
11-1-61	H-13H	S	6	c	1.3	1.3												
11-1-61	H-13E	S	4	c	.8	.8												
11-1-61	L-19A	S	4	c	2.5	2.5												
11-1-61	L-20A	S	4	c	5.5	5.5										A4, AE22, AE98, A4		
11-1-61	H-13E	S	7	c	1.5	1.5										A4, A1, K3, A4		
11-1-61	H-13E	S	11	c	1.3	1.3												
11-1-61	L-20A	S	2	c	.8	.8	.5		.5	.5	.5	.5	.5	.5		TW 200, 20		
11-1-61	H-13E	S	4	c	2.0	2.0												
11-1-61	L-20A	S	1	c	.3	.3										.3 .3		
11-1-61	L-20A	S	4	c	1.5	1.0	.5		.5	.5	.5	.5	.5	.5		J, 12, 12		
11-1-61	H-13H	S	6	c	1.8	1.8												
11-1-61	L-19A	S	1	c	1.5	1.5												
11-1-61	H-13H	S	4	c	.5	.5												
11-1-61	H-13E	S	2	c	.3	.3												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	2.5	2.5												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												
11-1-61	L-19A	S	3	c	1.0	1.0												
11-1-61	L-19A	S	2	c	1.0	1.0												
11-1-61	L-19A	S	1	c	1.0	1.0												
11-1-61	L-19A	S	5	c	1.0	1.0												
11-1-61	L-19A	S	4	c	1.0	1.0												

## SECTION II—SUMMARY OF PILOT EXPERIENCE

DUTY a	SINGLE ENGINE b	MULTIENGINE c	L/T HELICOPTER d	3 OTHER e	TOTAL f
14 INSTRUCTOR PILOT					
15 FIRST PILOT	445	50	1 377	4 (Jet)	826
16. COPILOT	27	2	2		31
17 MIL STUDENT PILOT	184				184
18 CIVILIAN PILOT					
19 FOREIGN MIL PILOT					
20 TOTAL PILOT TIME	656	2	379		1041
21 PILOT COMBAT TIME (Included in above totals)					

## SECTION III—SYNTHETIC INSTRUMENT TRAINER

SECTION IV—ARMY AIRCRAFT IN WHICH CURRENTLY QUALIFIED  
(Includes check rides, transition, or other qualification training)

DATE a	TYPE b	TIME c	ACFT TYPE MODEL SERIES d	DATE b
			L-19A,D,E	11 Apr 57
			H-23B,C,D	23 MAY 58
			H-13D,E,G,H	18 JUN 58
			L-20A	15 FEB 59
22 TOTAL THIS SHEET		0		
23 TOTAL BROUGHT FORWARD FROM SHEET NO. 21		37		
24 TOTAL TO DATE		37		

## 25. REMARKS (Includes suspensions and restrictions, violations, accidents, statement of compliance)

On 25 October 1960 at A-4 AAF (Uijongbu, Korea) 1/Lt Donald G. Bales while performing duty as pilot in an H-13 Helicopter narrowly avoided a midair collision with another Helicopter.

The near miss occurred as follows: Lt Bales departed A-4 on a short mission using runway 280. Upon return 15 minutes later he noticed that his radio had become inoperative. In the interim, the wind changed and runway 010 was designated the active. Unaware of this Lt Bales entered traffic for 280 and proceeded to execute a 360 degree autorotation. At this moment another H-13 cleared by the tower to land on runway 010 was on final approach. Both pilots saw each other simultaneously and made abrupt turns to avoid a collision. Lt Bales was admonished by the unit commander for committing an unsafe act.

"27 October, 1960, record closed, PCS"

A TRUE COPY

(b) (6)



## SECTION II—SUMMARY OF PILOT EXPERIENCE

DUTY	SINGLE ENGINE a	MULTIENGINE c	HELICOPTER b	OTHER e	TOTAL f
14 INSTRUCTOR PILOT					
15 FIRST PILOT	463		380	4(Jet)	847
16. COPILOT	27	10	2		39
17 MIL STUDENT PILOT	184				184
18 CIVILIAN PILOT					
19 FOREIGN MIL PILOT					
20 TOTAL PILOT TIME	674	10	382	4	1070
21. PILOT COMBAT TIME (Included in above totals)					

## SECTION III—SYNTHETIC INSTRUMENT TRAINER

SECTION IV—ARMY AIRCRAFT IN WHICH CURRENTLY QUALIFIED  
(Includes check rides, transition, or other qualification training)

DATE a	TYPE b	TIME c	ACFT TYPE MODEL SERIES	DATE b
			L-19A,D,E	11 Apr 57
			H-23B,C,D	23 May 58
			H-13D,E,G,H	18 Jun 58
			L-20A	15 Feb 59
22	TOTAL THIS SHEET			
23	TOTAL BROUGHT FORWARD FROM SHEET NO. 22	37		
24	TOTAL TO DATE	37		

25 REMARKS (Includes suspensions and restrictions, violations, accidents, statement of compliance)

A TRUE COPY

(b) (6)

INDIVIDUAL FLIGHT RECORD—ARMY AVIATOR (AFR 95-64)										1. PERIOD COVERED 1960 DECEMBER	2. SHEET NO. 24									
3. LAST NAME—FIRST NAME—MIDDLE INITIAL <b>BALES, DONALD G.</b>					4. SERVICE NO. <b>(b) (6)</b>					5. GRADE AND COMPONENT <b>1/LT RA</b>					Active Duty <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					
6. ORIGINAL RATING AND DATE <b>ARAV 11 APR 57</b>					7. PRESENT RATING AND DATE <b>ARAV 11 APR 57</b>					8. TYPE INSTRUMENT CERTIFICATE <b>NONE</b>										
9. ORIGINATING ORGANIZATION AND STATION <b>U. S. ARMY AIR DEFENCE CENTER Fort Bliss, Texas</b>										10. NAME OF OVERLAPPING APPROVING <b>(b) (6)</b>										
SECTION I—RECORD OF FLYING TIME																				
DATE	AIR-CRAFT TYPE MODEL SERIES	MISSION SYM	NUM- BER OF LAND- INGS	INSTRU- CTOR PILOT	FIRST PILOT	FIRST PILOT FLYING TIME				COPILOT FLYING TIME				CROSS COUNTRY FROM—TO						
						DAY		NIGHT		DAY		NIGHT								
					VFR	WEATHER INST	VFR	WEATHER INST	VFR	WEATHER INST	VFR	WEATHER INST								
4	5	c	d	e	f	g	h	i	j	k	l	m	n	o	p					
1	L-19A	S 6				1.5	1.5													
2	L-19A	S 2				2.5	2.5													
2	T-19D	S 2				1.0	1.0													
2	H-23D	S 2				.8	.8													
3	L-19E	S 1				.5	.5													
3	H-23D	S 8				1.0	1.0													
5	L-20A	S 1				.3	.3													
5	L-20A	S 1				4.1	4.1									<b>BIF-FHU-BIF</b>				
6	L-19A	S 1				1.8	1.8													
6	L-19A	S 1				.8	.8													
6	L-20A	S 3				1.3	1.3													
8	L-19E	S 4				.8	.8													
9	L-20A	S 1				1.5	1.5													
9	H-23D	S 6				1.0	1.0													
10	L-23D	S 2										3.0	3.0			<b>BIF-FHU-BIF</b>				
14	H-34C	S 5				4.5	4.5													
15	T-19D	S 3				1.3	1.3													
16	L-20A	S 2				1.8	1.8													
16	H-23D	S 10				4.3	4.3													
17	L-19A	S 2				1.5	1.5													
19	L-19E	S 1				.3	.3			1-107						<b>16 DEC EC</b>				
19	L-20A	S 2										1.0	1.0							
21	L-20A	S 1				1.0	1.0									<b>16 DEC EC</b>				
21	L-20A	S 1				.8	.8									<b>16 DEC EC</b>				
22	H-23D	S 6				.3	.3									<b>16 DEC EC</b>				
23	L-23D	S 2										1.0	1.0							
24	L-20A	S 2				1.0	1.0									<b>16 DEC EC</b>				
26	L-20A	T 2				11.0	6.0		5.0							<b>BIF-MEM-TRI</b>				
11.	TOTALS THIS SHEET <b>(b) (6)</b>																			
12.	TOTALS BROUGHT FORWARD FROM SHEET NO 23										847	718	1	56		72	39	36	3	
13.	TOTALS TO DATE										894	760	1	61		72	44	41	3	

**SECTION II - SUMMARY OF PILOT EXPERIENCE**

SECTION II - SUMMARY OF PILOT EXPERIENCE					
DUTY	SINGLE ENGINE	MULTIENGINE	HELICOPTER	OTHER	TOTAL
14 INSTRUCTOR PILOT					
15 FIRST PILOT	498		392	4 (Jet)	894
16. COPILOT	28	14	2	-	44
17 MIL STUDENT PILOT	184				184
18 CIVILIAN PILOT					
19 FOREIGN MIL PILOT					
20 TOTAL PILOT TIME	710	14	394	4	1122
21 PILOT COMBAT TIME (Included in above totals)					

### **SECTION III—SYNTHETIC INSTRUMENT TRAINER**

**SECTION IV—ARMY AIRCRAFT IN WHICH CURRENTLY QUALIFIED**  
(Includes check rides, transition, or other qualification training)

**25. REMARKS** (Includes suspensions and restrictions, violations, accidents, statement of compliance)

26 Dec 60, L-20A, 54-1671 crashed on hilltop approx 12 miles east Tri-City Airport, Bristol, Tenn., 1st Lt Donald G Bales, (b) (6) found dead at wreckage. Cause of accident not determined as of this date.

27 Dec 60 records closed, Aviator Deceased

(b) (6)

1954-1955 - 1956  
1955-1956 - 1957

100-11-VK-2A

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AIRCRAFT FLIGHT REPORT AND MAINTENANCE RECORD AIRCRAFT INSPECTION AND MAINTENANCE												1. PAGE 1 OF 1 PAGES											
2. DATE	3. CREW CHIEF	4. ORGANIZATION	5. LOCATION	6. AIRCRAFT DATA				11. INSPECTION STATUS															
				TYPE, MODEL, SERIES	SERIAL NO.	NEXT PERIODIC DUE NO. 9		TYPE	COMPLETED	DATE DUE													
(b) (6)	USAADC	Fort Bliss, Texas	I-20A	54-1671				PRE-FLIGHT	( ) Dec 60														
7. ASSIGNMENT (Command)				ASSIGNMENT (Code)				THRU-FLIGHT															
8. POSSESSION (Command)				POSSESSION (Code)				POST-FLIGHT	3522:45	3537:45													
								PERIODIC	3516:40	3616:40													
9. STATUS TODAY		10. EXCEPTIONAL RELEASE										CALENDAR INSPECTION STATUS											
1	5	1		5								TYPE	DATE DUE										
2	6	2		6								P.O.	23 Dec 60+7										
3	7	3		7								P.E.	25 Dec 60+60										
4	8	4		8																			
12. HOURS AT LAST TIRN		13. AIRCRAFT TIME AND ENGINE DATA																					
3770:00(Aug 59)		AIRCRAFT	ENGINE NO.1	ENGINE NO.2	ENGINE NO.3	ENGINE NO.4	ENGINE NO.5	ENGINE NO.6	ENGINE NO.7	ENGINE NO.8	ATAPU												
TIME SINCE NEW OR OVERHAUL		3534:45	78:20																				
TIME TODAY																							
TOTAL TIME																							
OIL CHANGE DUE			9th P.E.																				
TOTAL GROUND AND TAXI TIME																							
14. ENGINE AFTER BURNER TIME		PREVIOUS										15. JET ENGINE HOT STARTS	PREVIOUS						16. NUMBER OF CLUTCH ENGAGEMENTS (Helicopter)	PREVIOUS			
		TODAY											TODAY						TODAY				
		TOTAL											TOTAL						TOTAL				
												MAXIMUM											
17. FUEL (Gallons)				18. OIL (Quarts or pints)								19. SERVICED				20. 21.							
SERVICE NO.		OCTANE	SERVICED	IN TANKS	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	BY	STATION	OXYGEN CHECKED								
		SER IN	SER IN	SER IN	SER IN	SER IN	SER IN	SER IN	SER IN	SER IN	SER IN	SER IN											
		80/87	-0-	137	-20								(b) (6)	F. B. T.									
		80/87	57	137	-20									F. B. T.									
TOTAL																							
22. DAILY GROUND AND TAXI TIME														23. 7 day insp. due (30 Dec 60) Radio+equip insp due (3541:40) Aileron link insp due (3535:45)									



AIRCRAFT FLIGHT REPORT AND MAINTENANCE RECORD DELAYED CORRECTION DISCREPANCY LIST				AIRCRAFT TYPE L-20A	SERIAL NO. 54-1671
SYSTEM NO.	SYMBOL	DISCREPANCY	ENTRY APPROVED BY	DATE FROM DD FORM 781-2	DATE TO DD FORM 781-2
2		8 Aug 58) T.O. 1L-20AA-521A Inspection of Attachment Brackets, Fuselage Tailplane Joint L-20A N/C/W	(b) (6)	4 Mar 60	
3		23 Dec 58) T.O. 1L-20A-543 Installation of Redesigned Fuselage Bracket for Attaching Horizontal Stabilizer N/C/W		4 Mar 60	
4		14 Aug 59) T.O. 1L-20-531 Installation of adapter for Attaching Tow Bar N/C/W		4 Mar 60	
3	I	14 Aug 59) Lock Missing on RH Passenger Door (Vou No 2342-60)		4 Mar 60	6 Mar 60
5	I	14 Aug 59) Wrong Type Brake Cylinders Installed, Balance Line Open in Accessory Section (Vou No. 2338-60, 2339-60, 2340-60, 2341-60.)		4 Mar 60	5 May 60
3		13 Oct 59) T.O. 1L-20-521 Modification of Torque Tube and lower lever Avm Assy N/C/W		4 Mar 60	
4	B	8 Mar 60) Rivets Loose & Broken in Rt Landing Gear Fairing		9 Mar 60	23 May 60
4	B	8 Mar 60) Rivets in Left Hand Gear Fairing Loose		9 Mar 60	23 May 60
12	B	8 Mar 60) Dress & Repaint Prop.		9 Mar 60	23 May 60
3	B	8 Mar 60) Rivets Working Right Elev Tip		9 Mar 60	23 May 60
3	B	8 Mar 60) Pulleys Aft of Batt Box in Fuselage Worn		9 Mar 60	23 May 60
6	O	17 Mar 60) Cabin Heat Control Lock Missing VO#		31 May 60	16 Jun 60
3		25 Oct 60) Tya-Down Ring Miss., Front Left Of Pass.-Comp. Floor(RQ		25 Oct 60	
12		27 Oct 60) Screw Stripped in Prop Spinner (FM)		21 Nov 60	
3		18 Nov 60) Right Front Top Window Sealant Need Replacing (FM)		21 Nov 60	
9	R	18 Nov 60) Oil Cooler mounting Gasket Leaking		21 Nov 60	25 Nov 60
3		18 Nov 60) Nr 2&4 Holes on front of Left Upper Main Gear Fairing Elongated (FM)		21 Nov 60	
3		18 Nov 60) Left Rear Corner of T.p Cowling Cracked (FM)		21 Nov 60	
3		18 Nov 60) Rivet Loose on Brace on Front Top Cowling (FM)		21 Nov 60	
3		18 Nov 60) Top Cowling Padding deteriorated (FM)		21 Nov 60	

**AIRCRAFT FLIGHT REPORT AND MAINTENANCE RECORD**  
**DELAYED CORRECTION DISCREPANCY LIST**

## • SYSTEM

**SYMBOL**

DISCREPANCY

**AIRCRAFT TYPE**

SERIAL NO.

- 9 -

DATE, FROM  
DD FORM 70

DATE TO  
DD FORM 781-2

(b) (6)

SECURITY CLASSIFICATION (#any)

## DISPOSITION FORM

FILE NO. AJCTO

SUBJECT Estimate of Damages, L-20A, 54-1671

TO President, Accident Bd    FROM TC Maintenance    DATE 4 Jan 61    COMMENT NO. 1

(b) (6)

L-20A, Serial Number 54-1671 was inspected at the crash site and all components, assemblies and sub-assemblies were determined to be damaged beyond economical repair. Total loss to the Government is estimated to be \$47,200.

(b) (6)



ARMY AVIATION DISPENSARY  
ENT CLINIC  
US ARMY HOSPITAL  
FORT CAMPBELL, KENTUCKY

9 January 1961

MEDICAL REPORT OF INDIVIDUAL INVOLVED IN AIRCRAFT ACCIDENT

Pilot Involved: Bales, Donald G., 1st Lt., (b) (6)  
Aviation Detachment, Air Defense Section  
Fort Bliss, Texas

Circumstances: This 27 year old rated (b) (6) pilot was fatally injured in an aircraft accident (L-20) on 27 December 1960 near Bristol, Tennessee.  
(For further details see aircraft accident report proper.)

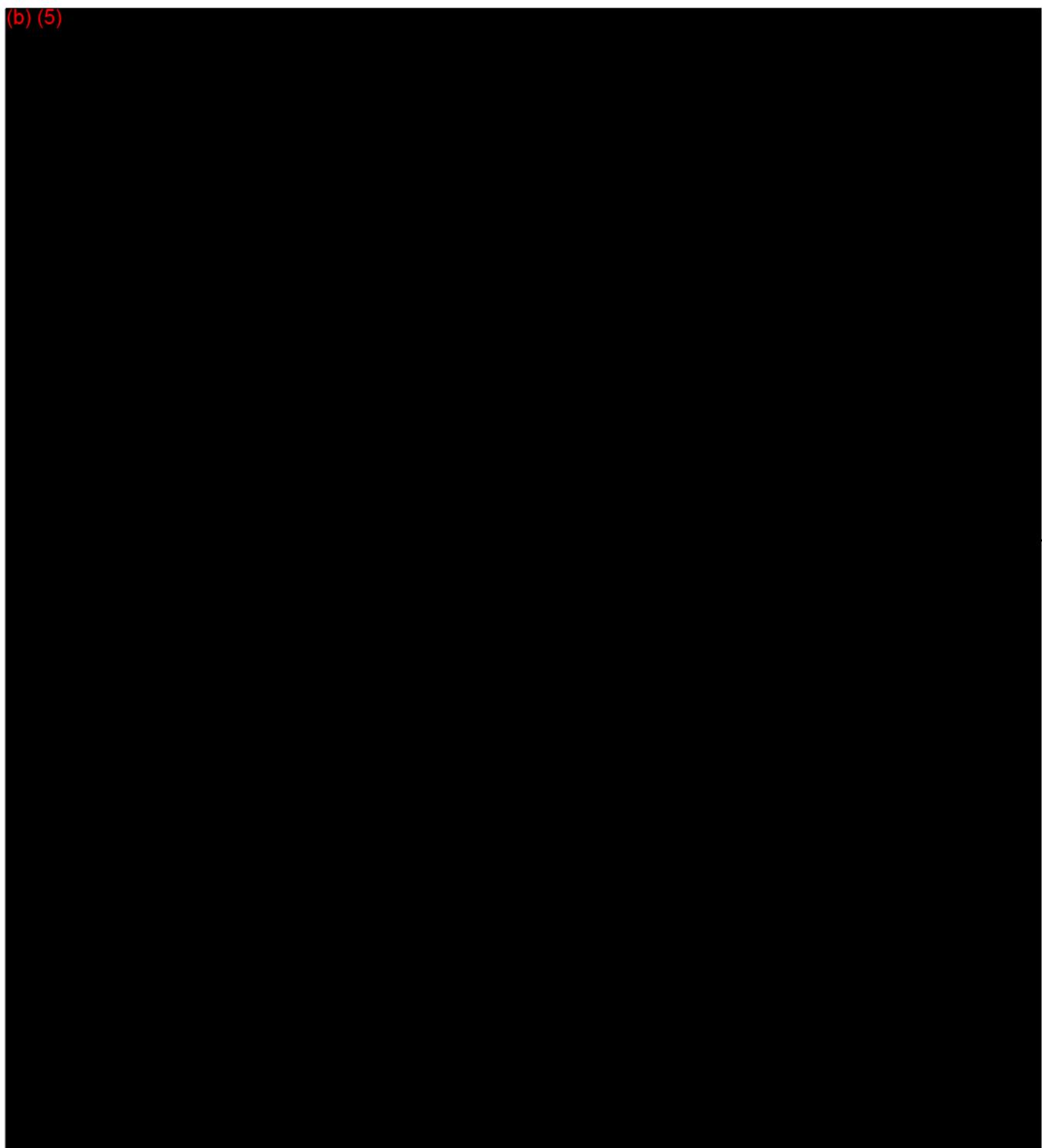
Medical Condition: A list of injuries and their descriptions will be found in autopsy report.

Medical and Safety Aspects: This 27 year old rated pilot filed a routine flight plan on 26 December 1960 from Fort Bliss, Texas to Fort Belvoir. Although an original 19 hour plan was filed he estimated a 12 to 13 hour flight with the help of expected tail winds. He maintained an altitude of 11,500 feet and subsequently made two fuel stops. 1st Lt. Bales reported over Knoxville, Tennessee at 11,500 feet. Tri City Airport received his only message at about 0015 Eastern Standard Time, 27 December 60; the accident then occurred about 13 minutes later on a high ridge about 12 miles East of the Tri City Airport near Bristol, Tennessee. As far as I can ascertain, Lt. Bales was on course when he crashed into the 2100 foot ridge. (b) (5)

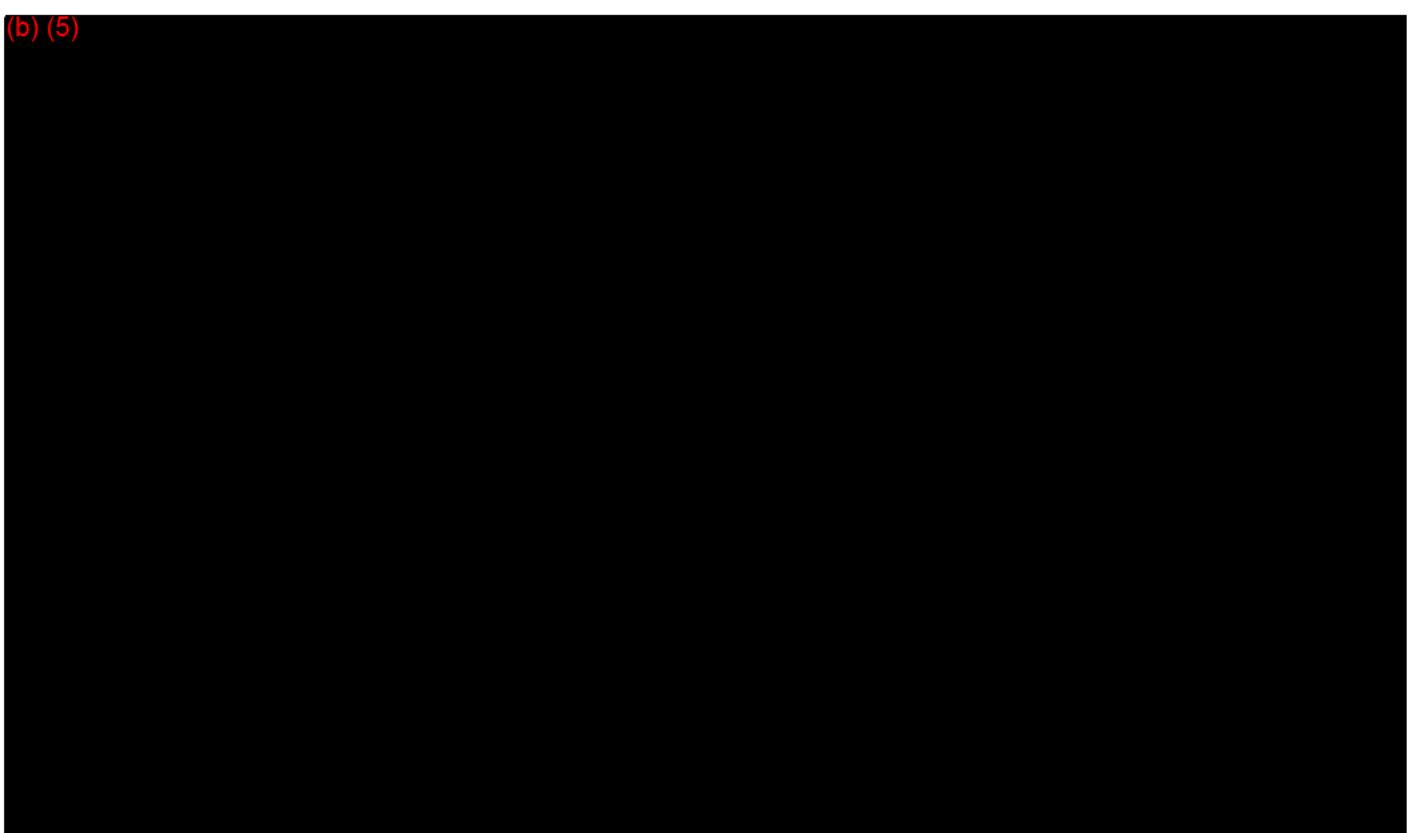
(b) (5)

(b) (5)

(b) (5)



(b) (5)



(b) (6)



CONFIDENTIAL



## MEDICAL REPORT OF AF AIRCRAFT ACCIDENT

Use this form in accordance with AF Reg. 62-14 and AF Manual 62-5, "Aircraft Accident Prevention-Investigation-Reporting." Fill in all spaces applicable. If additional space is needed, use additional sheet(s) and identify by proper section letter and subsection number.

### Section A—GENERAL INFORMATION

1. BASE INVESTIGATING ACCIDENT Fort Campbell, Ky.	2. ASSIGNED BASE OF AIRCRAFT Fort Bliss, Texas	3. APPROXIMATE DISTANCE OF ACCIDENT FROM INVESTIGATING BASE (Miles) 300 Miles	
4. PLACE OF ACCIDENT Near Bristol, Tennessee	5. AIRCRAFT TYPE, MODEL, SERIES L-20	6. TIME OF ACCIDENT (local) 0028 E.S.T.	7. DATE OF ACCIDENT 27 December 1960

### 8. BRIEF DESCRIPTION OF FACTORS AND EVENTS LEADING TO ACCIDENT

Lt. Bales was on a mission from Fort Bliss, Texas to Fort Belvoir. He reported in to the Tri City Airport, Tennessee 0015 E.S.T., 27 Dec. 1960; thirteen minutes later the plane crashed into a high ridge about 12 miles East of the airport near Bristol, Tenn. The L-20 was between 80-90% demolished. Lt. Bales was killed instantaneously upon impact.

### Section B—EQUIPMENT AND AIRCRAFT STRUCTURES (USE ADDITIONAL SHEETS AS NECESSARY)

1. FIXED SEATS: Nr. <u>2</u> Nr. occupied <u>1</u> Nr. failed <u>2</u>	6. PROTECTIVE HELMET: Available to all pers.? Yes <u>      </u> No <u>X</u> Type (e. g. P-1, P-1A, P-3, etc.) _____ Used by all pers.? Yes <u>      </u> No <u>X</u> Nr. used _____ Failed? Yes <u>      </u> No <u>      </u> Nr. failed _____
2. EJECTION SEATS: <u>N/A</u> Nr. Avail. (armed) _____ Used: Yes <u>      </u> No <u>      </u> Nr. used in downward ejection _____ Nr. used in upward ejection _____ Failed: Yes <u>      </u> No <u>      </u> Nr. failed _____	7. ANTI G SUIT: Available to all pers.? Yes <u>      </u> No <u>      </u> Type (e. g. G-3, G-4, etc.) _____ Used by all pers.? Yes <u>      </u> No <u>      </u> Nr. used _____ Failed? Yes <u>      </u> No <u>      </u> Nr. failed _____
3. CABIN PRESSURIZATION: <u>N/A</u> Available to all pers.? Yes <u>      </u> No <u>      </u> Used by all pers.? Yes <u>      </u> No <u>      </u> Failed? Yes <u>      </u> No <u>      </u>	8. PARACHUTES: Available to all pers.? Yes <u>X</u> No <u>      </u> Type (e. g. back pack, seat pack, etc.) <u>back pack</u> Used by all pers.? Yes <u>      </u> No <u>X</u> Nr. used _____ Failed? Yes <u>      </u> No <u>      </u> Nr. failed _____
4. OXYGEN SYSTEMS: <u>N/A</u> Available to all pers.? Yes <u>      </u> No <u>      </u> Type (e. g. high pressure, low pressure, etc.) _____ Used by all pers.? Yes <u>      </u> No <u>      </u> Date serviced _____ Failed? Yes <u>      </u> No <u>      </u> Time used this flight _____ Amount used this flight _____	9. AUTOMATIC LAP BELT RELEASE: Available for all pers. Yes <u>X</u> No <u>      </u> Used by all pers.? Yes <u>      </u> No <u>X</u> Nr. failed _____ Failed? Yes <u>      </u> No <u>X</u> Nr. failed _____
5. OXYGEN MASKS: Available to all pers.? Yes <u>      </u> No <u>      </u> Type (e. g. A-13A, Pressure demand, etc.) _____ Used by all personnel? Yes <u>      </u> No <u>      </u> Did mask(s) fit? Yes <u>      </u> No <u>      </u> Nr. poorly fitted _____ Failed? Yes <u>      </u> No <u>      </u> Nr. failed _____	10. OTHER PERSONAL EQUIPMENT (SPECIFY) <u>shoulder harness</u> Type (e. g. pressure suit) <u>                    </u> Nr. Used <u>none</u> Nr. Failed <u>none</u>

### 11. SPECIAL FACTORS WHICH CONTRIBUTED TO OR PREVENTED INJURY: (List any items of personal or aircraft equipment details of structure incidents such as being trapped in plane, or any other factors which aided or impeded escape from aircraft.)

none

### 12. SPECIFICALLY DESCRIBE DAMAGE TO

- Cockpit Windshield and top were collapsed  
Instrument panel forced back
- Seats, shoulder harness, safety belt Seats were torn free  
shoulder harness and safety belt were not fastened
- Crew stations (other than cockpit) N/A
- Emergency exits, hatches, canopies none
- Passenger cabin partially demolished

**Section C—PERSONNEL INVOLVED—**(Note: List all personnel aboard the aircraft at the time of the accident including passengers)

<sup>1</sup> Use following code numbers and letters for position of body: Seated (1); Standing (2); Prone (3); Supine (4); Crouched (5); Facing forward (F); Facing rear (R); Facing inward (I); Facing outward (O). Examples: 2F means Standing Facing Forward; 5R means Crouched Facing Rear, etc.

<sup>4</sup>Use following code numbers to specify result to personnel: (1) No injury; (2) Minor injury; (3) Major injury; (4) Fatal; (5) Missing. (See AFR 62-14.)

**Section D—MEDICAL OFFICER'S RECOMMENDATIONS**

(b) (5), (b) (6)

**MEDICAL REPORT OF AN INDIVIDUAL INVOLVED IN  
AN AIRCRAFT ACCIDENT**

Use this form in accordance with AF Reg. 62-14 and AF Manual 62-5, "Aircraft Accident Prevention-Investigation-Reporting." If additional space is needed, use Section F hereof and/or additional sheet(s) as necessary, identifying by proper section letter.

**Section A—GENERAL INFORMATION**

1. LAST NAME FIRST NAME MIDDLE NAME		2. SERVICE NR.	3. DATE OF ACCIDENT	4. CURRENT RATING AND DATE aviator	5. FLIGHT DUTY AT TIME OF ACCIDENT pilot
Bales, Donald G. (b) (6)			27 Dec. 1960		
6. DATE OF BIRTH (b) [REDACTED]	7. PILOT'S AFSC Primary _____ Duty _____	8. WAS PILOT ON FLYING STATUS WITH WAIVER? Yes _____ No X _____	DATE GRANTED N/A	FOR WHAT DEFECT? N/A	
9. DATE OF LAST PHYSICAL EXAM. FOR FLYING Class I _____ Class II _____ Defects (Specify) _____		10. NUMBER OF DAYS RESTRICTED FROM FLYING AS RESULT OF THIS ACCIDENT Actual _____ Estimated _____ Explain: Fatality			
11. DAYS HOSPITALIZED: Est. _____ Actual _____ (If none indicate) Fatality			12. IF FATAL, TIME AND DATE OF DEATH 0028 E.S.T. 27 Dec. 1960	13. WAS AUTOPSY PERFORMED? Yes X _____ No _____ Report fully in Section F.	
14. SPECIFY PRIMARY INJURY OR PRIMARY CAUSE OF DEATH (b) (6)			15. MEANS USED TO IDENTIFY BODY I.D. card I.D. tags		

**Section B—PERSONAL FACTORS (Pilot or Crew Member Only)**

**One or more checks should be given for items 1 through 8 below. A narrative statement giving the information on which each check is based is desirable.**

## I. HOW DID THE MAN REACT DURING THE ACCIDENT SEQUENCE?

{Check one}

- Happened too quickly for corrective action.  
 No corrective action taken due to failure to recognize the situation.  
 Faulty corrective action taken due to emotional confusion.

Remained calm but took adequate corrective action too late.  
 Could not obtain information (fatality, etc.).  
 Other (Explain) \_\_\_\_\_

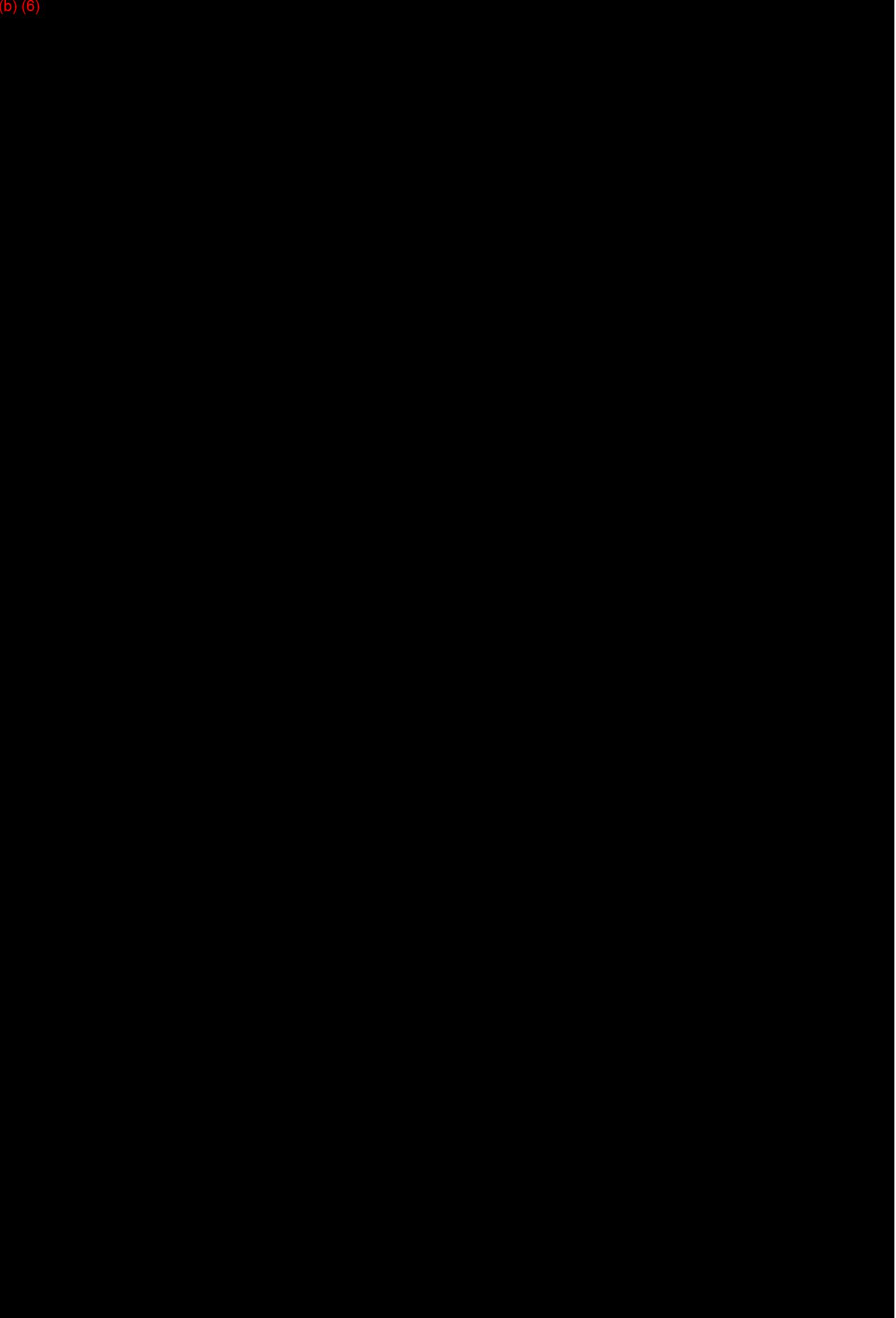
**For additional narrative**

**2. Did the man demonstrate a tendency toward any of the following?**

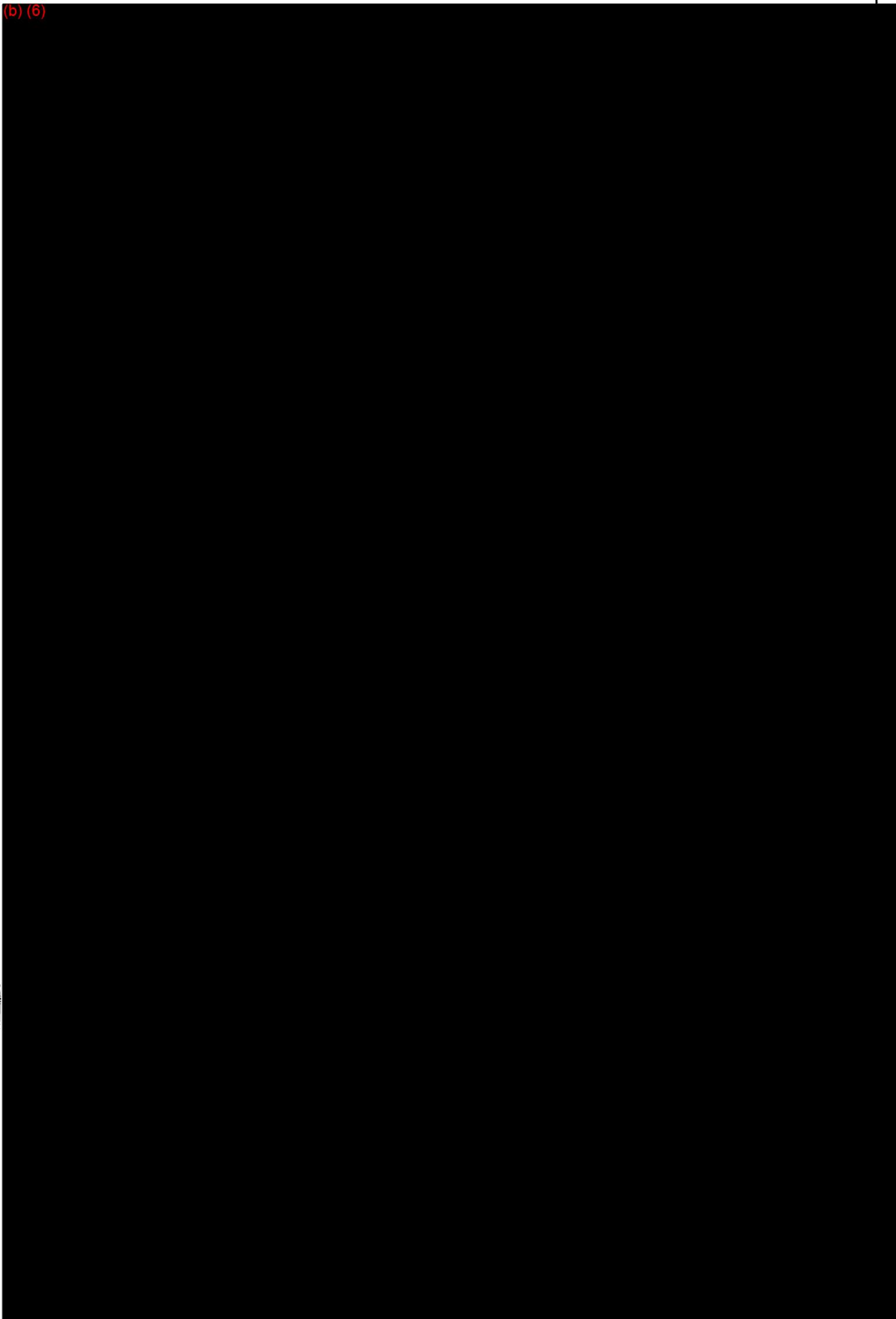
Before Accident	Immediately Following (12 hrs.)	Over 24 Hrs. Later	Before Accident	Immediately Following (12 hrs.)	Over 24 Hrs. Later
(b) (5)			(b) (5)		
	Excessive anxiety				Excessive elation
	Guilt feeling				Feeling of persecution
	Obsessive compulsive behavior				Amnesia
	Phobic reactions				Disorientation for time, place or person
	Psychosomatic complaints				Use of alcohol or drugs (explain)
	Abnormal fatigue (neurotic)				Unable to determine (fatality, etc.)
	Withdrawal behavior				No abnormal reaction
	Depression				Other (Specify)

**For additional narrative**

(b) (6)



(b) (6)



## Section E—STRUCTURES AND EQUIPMENT

Describe fully all aircraft structures or equipment which contributed to the injuries identified in Sections C and D hereof. Include any recommendations for changes leading to prevention of similar injuries.

(b) (6)



## Section F—TREATMENT AND COMPLICATIONS

Describe treatment given, i. e., repair of lacerations, open reduction of fractures, etc. Describe any complications and list any significant sequelae.

Fatality

## Section G—USE THIS SPACE FOR REPORT OF AUTOPSY OR FOR ANY EXTENSIONS OF PRECEDING SECTIONS

(USE ADDITIONAL SHEETS AS NECESSARY)

DATE

(b) (6)



9 Jan 61

AF FORM 1 FEB 56 14b Previous editions of this form may be used.

U. S. GOVERNMENT PRINTING OFFICE 196-O-375075

Page 4

## UNSATISFACTORY REPORT

REPORT CONTROL SYMBOL  
TC-208

1. ACTION AGENCY		2. CATEGORY (Indicate 1 Emergency, 2 Urgent or 3 Routine)		
SERIAL NO.	PROJECT NO.	3 REPORTING ACTIVITY	MAJOR COMMAND	ACTION AGENCY

3. REPORTING ACTIVITY				
UR SERIAL NO.	DATE	ORGANIZATION	STATION	
61-TAFM-2	11 Jan 61	Trans Aircraft Fld Maint	Ft Campbell, Ky	

4. IDENTIFICATION		5. SUPPLEMENTARY DATA			
ITEM	ARC 55 Radio Console Location L-20	QUANTITY IN USE	n/a		
PROPERTY CLASS	n/a	QUANTITY IN STOCK	n/a		
SERIAL NO.	n/a	QUANTITY INSPECTED	n/a	QUANTITY DEFECTIVE	n/a
STOCK OR PART NO.	n/a	NO. PREVIOUS FAILURES	n/a		
PRIME CONTRACTOR	DeHavilland	LAST RECONDITIONING ACTIVITY	n/a		
MANUFACTURER	Same	SINCE NEW	n/a		
ORDER OR SHIPMENT NO.	n/a	SINCE RECONDITION	n/a		
PARTS CATALOG TO/TM	1-11-20A-2	SUGGESTION NO.	n/a		
FIGURE AND INDEX NO.	Page 262N				

7. INSTALLED ON (Indicate major components and end item on which defective item installed or applicable to)				
NAME		TYPE, MODEL AND SERIES	SERIAL NO.	
Fixed Wing Aircraft		L-20 Series	All serials	

8. EXHIBIT DISPOSITION AND INCLOSURES (Place X in proper blocks)							
ATTACHED	SENT UNDER SEPARATE COVER	HELD FOR DISPOSITION (INSTRUCTIONS)	REPAIRED OR RETURNED TO SERVICE	TO OVERHAUL FACILITY INDICATE BELOW	DISPOSED OF (Explain below)	<input checked="" type="checkbox"/>	INCLOSURES (Indicate below)

9. DETAILS (1. Circumstances prior to difficulty. 2. Description of difficulty. 3. Cause. 4. Action taken. 5. Recommendations)

(b) (5)

3. As stated above.

4. None.

(b) (5)

6. One photo of large pilot adjusting console is attached.

REPORTED BY:

(b) (6)



(b) (6)

ARMED FORCES INSTITUTE OF PATHOLOGY  
WASHINGTON 25, D. C.

(b) (6)

REFERRED TO AFMES

ARMED FORCES INSTITUTE OF PATHOLOGY  
WASHINGTON 25, D.C.

REFERRED TO AFMES



HEADQUARTERS  
DEPARTMENT OF THE ARMY  
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR MILITARY OPERATIONS  
BOARD FOR AVIATION ACCIDENT RESEARCH  
FORT RUCKER, ALABAMA

BAAR-AR

10 March 1961

SUBJECT: Accident Report, Pilot, Donald G. Bales, 1st Lt, 27 December 1960

TO: (b) (6)  
Chief of Facilities Division  
Director of Army Aviation  
Office of the Deputy Chief of Staff  
for Military Operations  
Washington 25, D. C.

(b) 1. Accident report forwarded as per telephone conversation between  
(c) [REDACTED], 10 March 1961.

2. Request this report be returned to USABAAR upon completion of  
your requirement.

FOR THE DIRECTOR:

(b) (6)

1 Incl  
Acct Rept, 03018



TO BE USED FOR ACCIDENT PREVENTION PURPOSES ONLY

~~RECIPIENT~~ ~~DO NOT USE THIS REPORT FOR ADJUDICATIVE PURPOSES~~  
~~OR FOR MATTER OF PRACTICE, LITIGATION, OR COMPETITION~~



HEADQUARTERS  
DEPARTMENT OF THE ARMY  
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR MILITARY OPERATIONS  
BOARD FOR AVIATION ACCIDENT RESEARCH  
FORT RUCKER, ALABAMA

(b) (6)

BAAR-ID

12 January 1961

MEMORANDUM TO: Director, USABAAR

27 Dec 60  
03018

SUBJECT: Report of Investigators Assisting in Investigation  
of L-20 SN 54-1671 Aircraft Accident, 10 Miles East  
of Tri City Airport, Tennessee.

GENERAL:

A telephone call was received by USABAAR from a (b) (6)  
(b) (6) [REDACTED] Fort Campbell, Kentucky, who was President of the Aircraft Investigating Board, 28 December 1960. The L-20 belonged to Fourth Army and Fourth Army had requested Fort Campbell through Third Army to investigate the accident. Assistance of USABAAR investigators was requested.

(b) (6) [REDACTED] were dispatched to the scene.

1. THE ACCIDENT:

The crash occurred on 27 December 1960 at 0030 EST. The crash site was on a 2100 foot hill, ten miles from Tri City Airport on a heading of 102° or 4 miles from Tri City Omni on a heading of 270° or 1 mile north of the V16-V185E Airways. The site was only accessible on foot and no heavy or mobile equipment could be utilized. The aircraft had crashed on a heading of 060°, fatally injuring the pilot. It struck the trees 154 feet below the crest of the hill in a wing level attitude with the engine developing cruise power or less. Both wings were severed at the root as the aircraft descended.

BAAR-ID

12 January 1961

SUBJECT: Report of Investigators Assisting in Investigation  
of L-20 SN 54-1671 Aircraft Accident, 10 Miles East  
of Tri City Airport, Tennessee.

through the trees, and initial ground contact was 71 feet from the first tree strike. The angle of impact was approximately 50° nose down attitude in relation to the plane of the ground or 10 to 15° nose down below horizon. (Upslope of hill was 35 to 45°) The main part of the fuselage came to rest approximately 12 feet from crest of the hill, or approximately 142 feet from the first tree strike.

2. INVESTIGATION AND ANALYSIS:

The investigation team arrived at Tri City Airport at night on 29 December and were met by the Accident Investigation Board members who were as follows: (b) (6)

(b) (6)

(b) (6) The USABAAR team was briefed on details of the accident which were known by the Board at that time.

On the morning of 30 December, (b) (6) proceeded to the accident scene with part of the Board members, and (b) (6) proceeded with the interrogation of the witnesses.

(b) (5)



BAAR-ID

12 January 1960

SUBJECT: Report of Investigators Assisting in Investigation  
of L-20 SN 54-1671 Aircraft Accident, 10 Miles East  
of Tri City Airport, Tennessee.

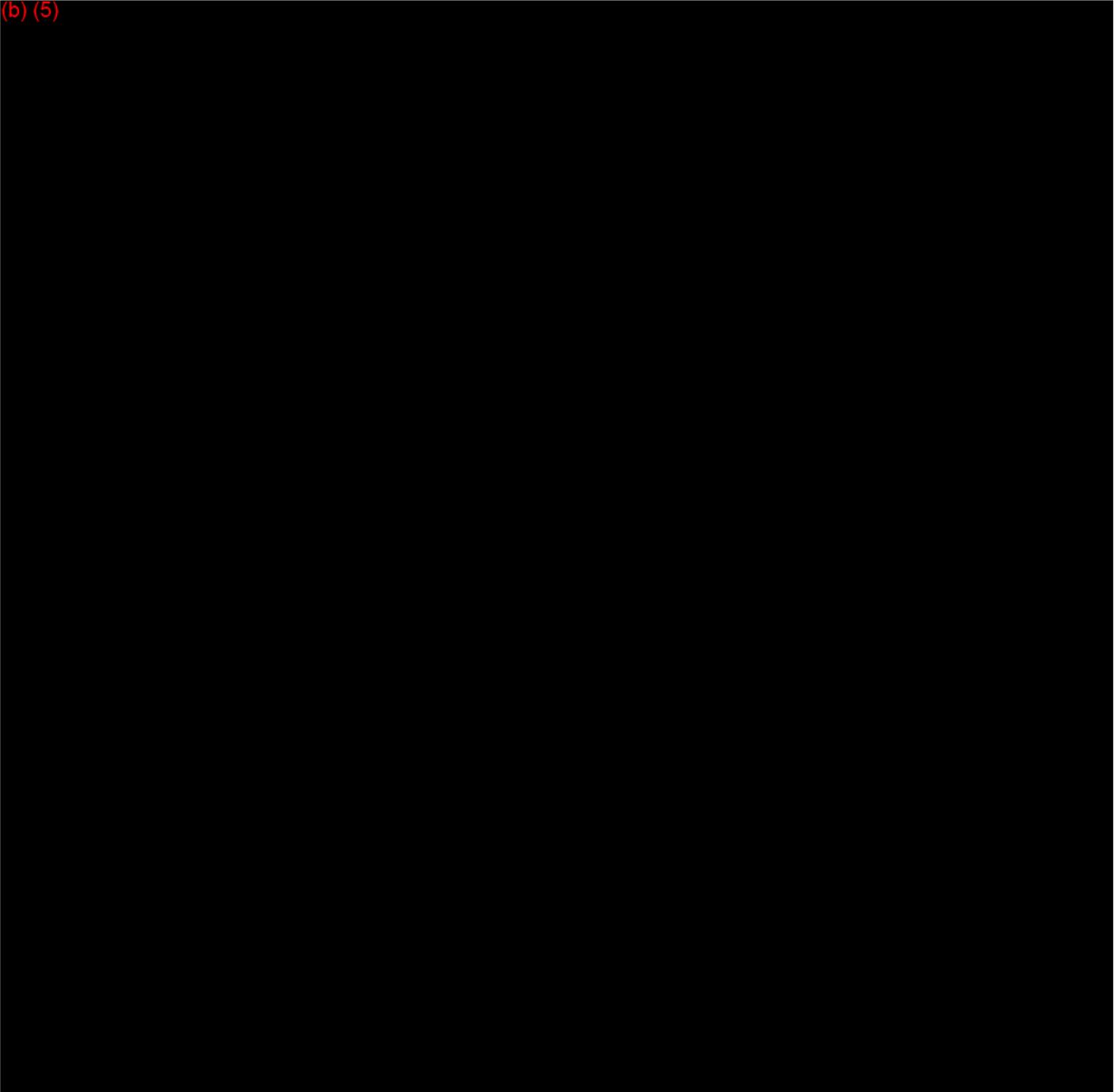
(b) (5)

BAAR-ID

12 January 1961

SUBJECT: Report of Investigators Assisting in Investigation  
of L-20 SN 54-1671 Aircraft Accident, 10 Miles East  
of Tri City Airport, Tennessee.

(b) (5)

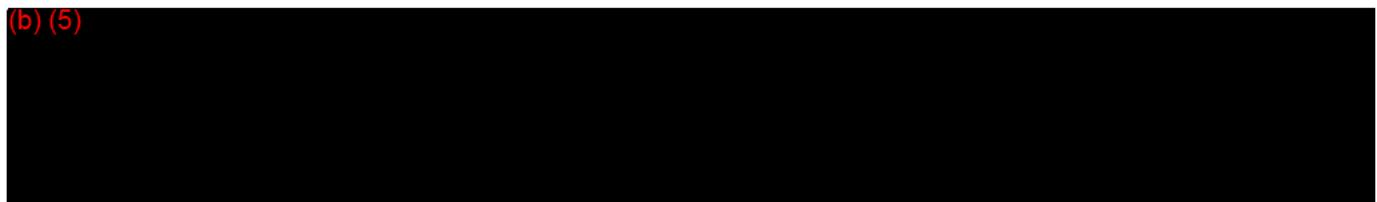


BAAR-ID

12 January 1961

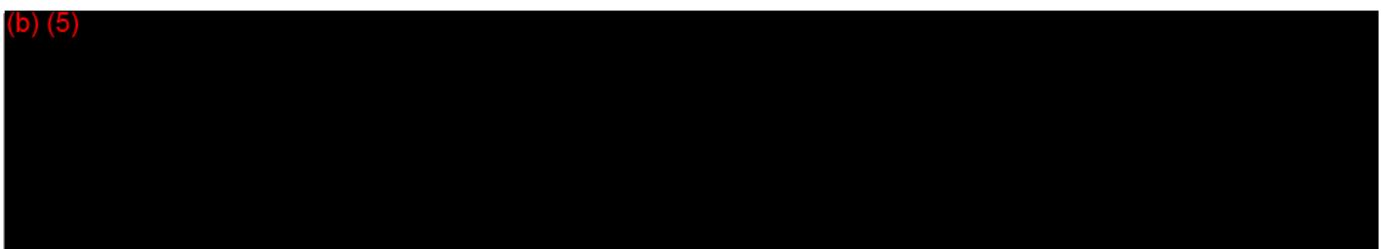
SUBJECT: Report of Investigators Assisting in Investigation  
of L-20 SN 54-1671 Aircraft Accident, 10 Miles East  
of Tri City Airport, Tennessee.

(b) (5)



4. RECOMMENDATIONS:

(b) (5)

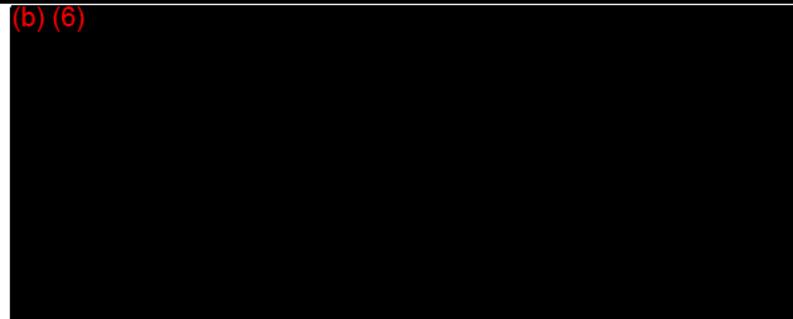


5. USABAAR PERSONNEL PARTICIPATING IN THE INVESTIGATION:

(b) (6)



(b) (6)



Attachments:

1. Photos, Crash Scene
2. Photos, Acdt Area
3. Route map
4. Statements.

(b) (6)

13-3522-115-60-5

Scout 25 77-12/85 Co



UF-OUT-25771-13/43



45-arc-2577-8 45-60



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15-056-2577-24/AJ-60

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16-056-2577-40/AJ-60



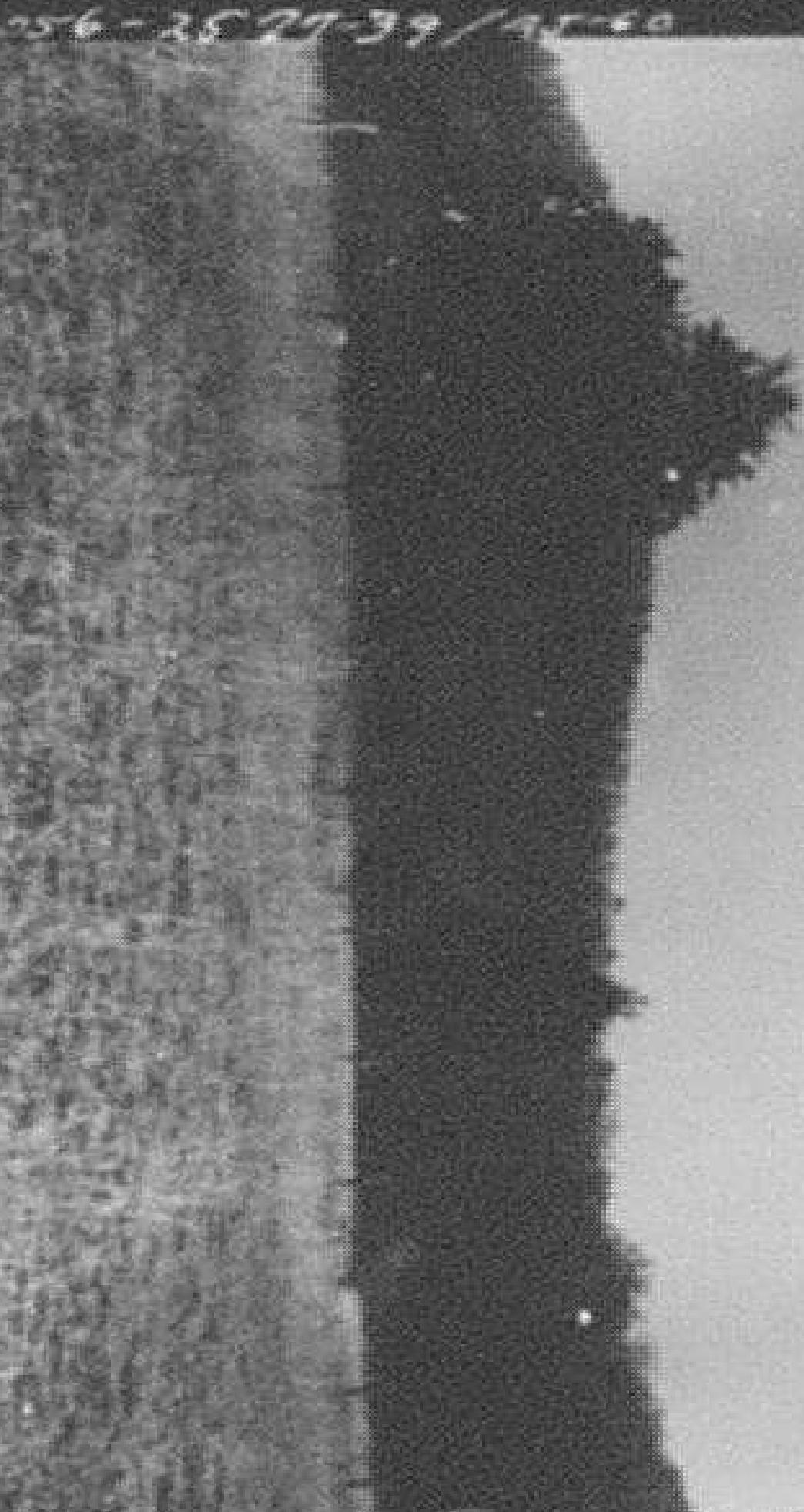
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5-056-2572 12 JAS-60





236-292234-1

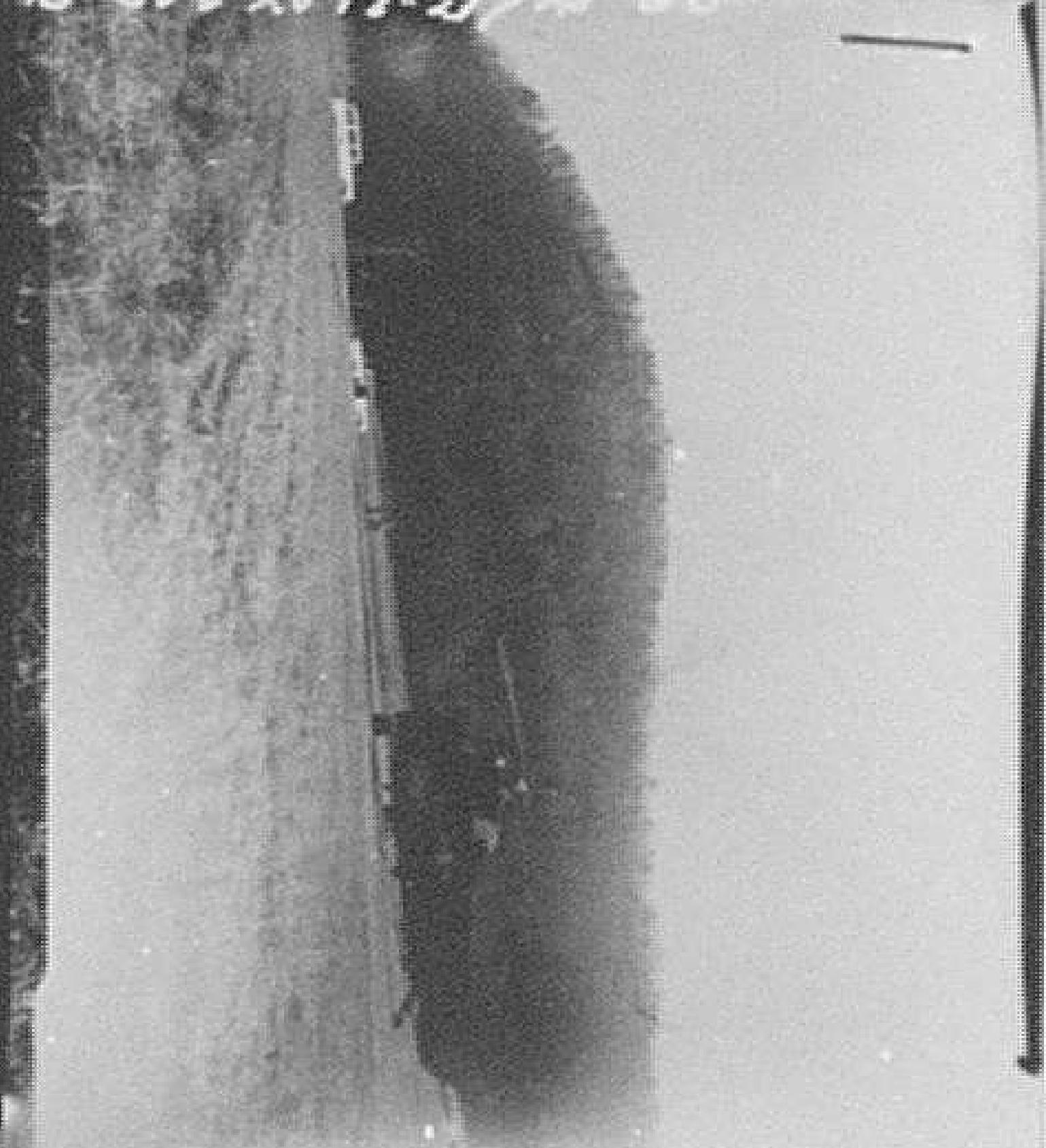


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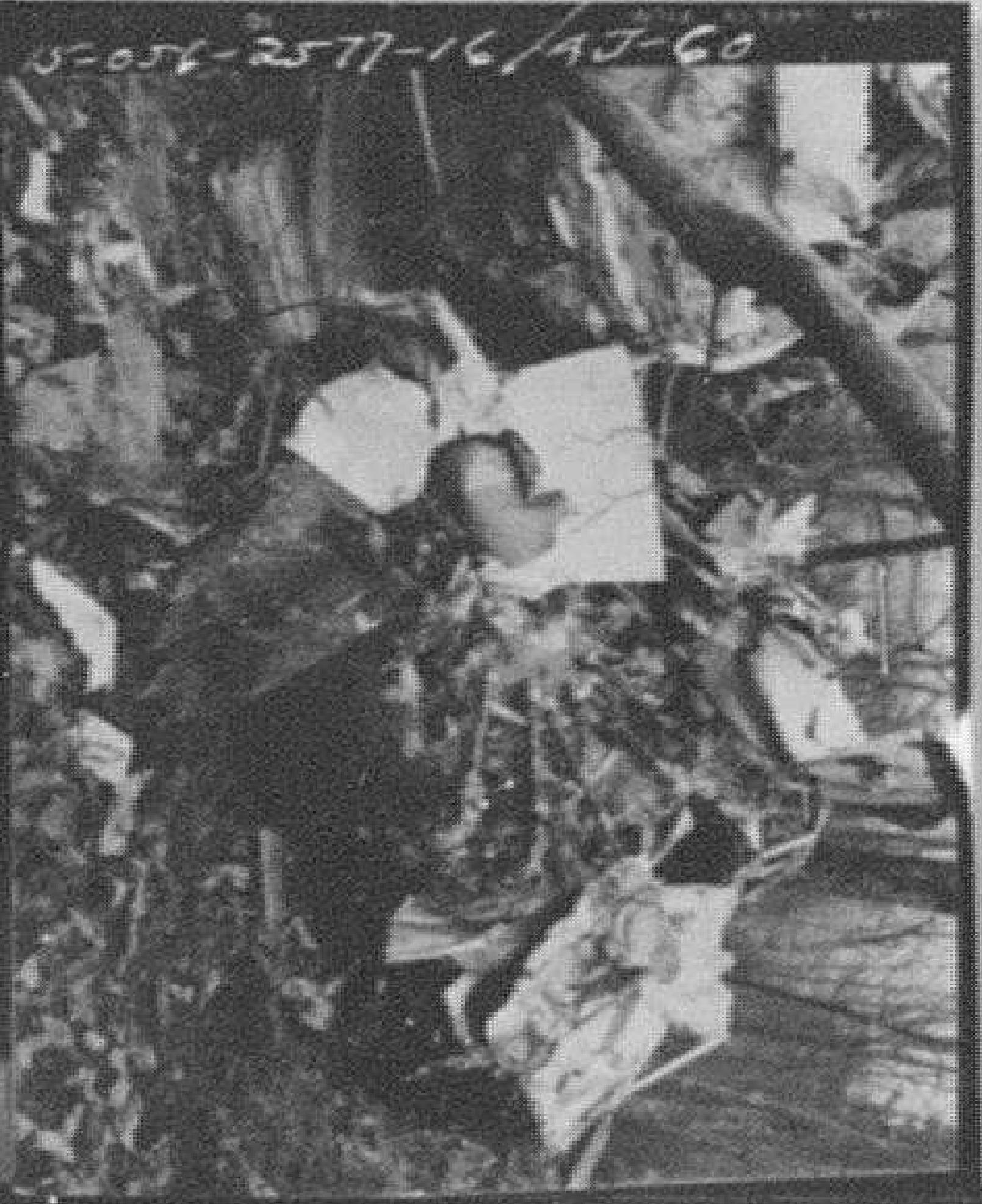


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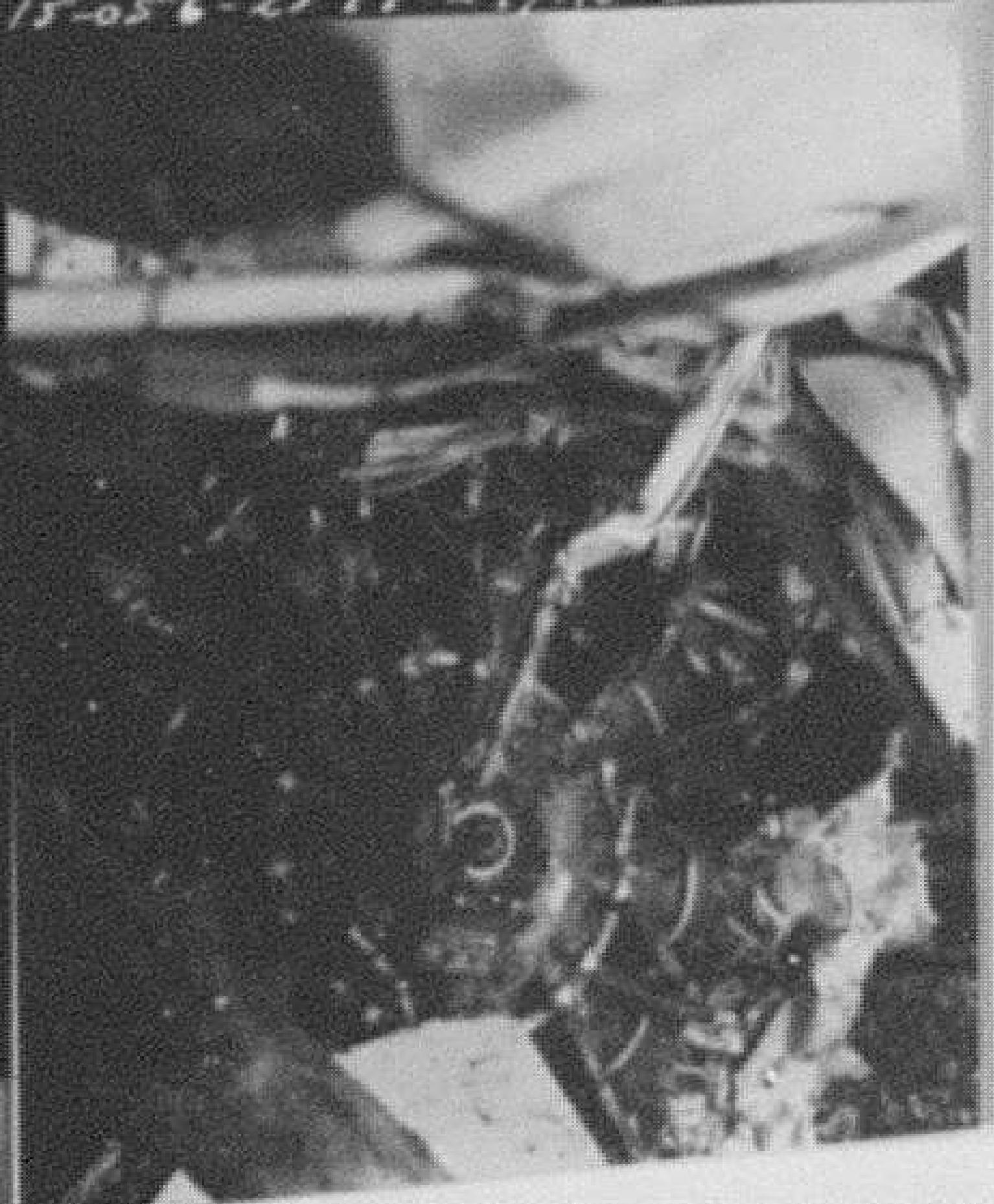
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15-056-1577-27/A5-60



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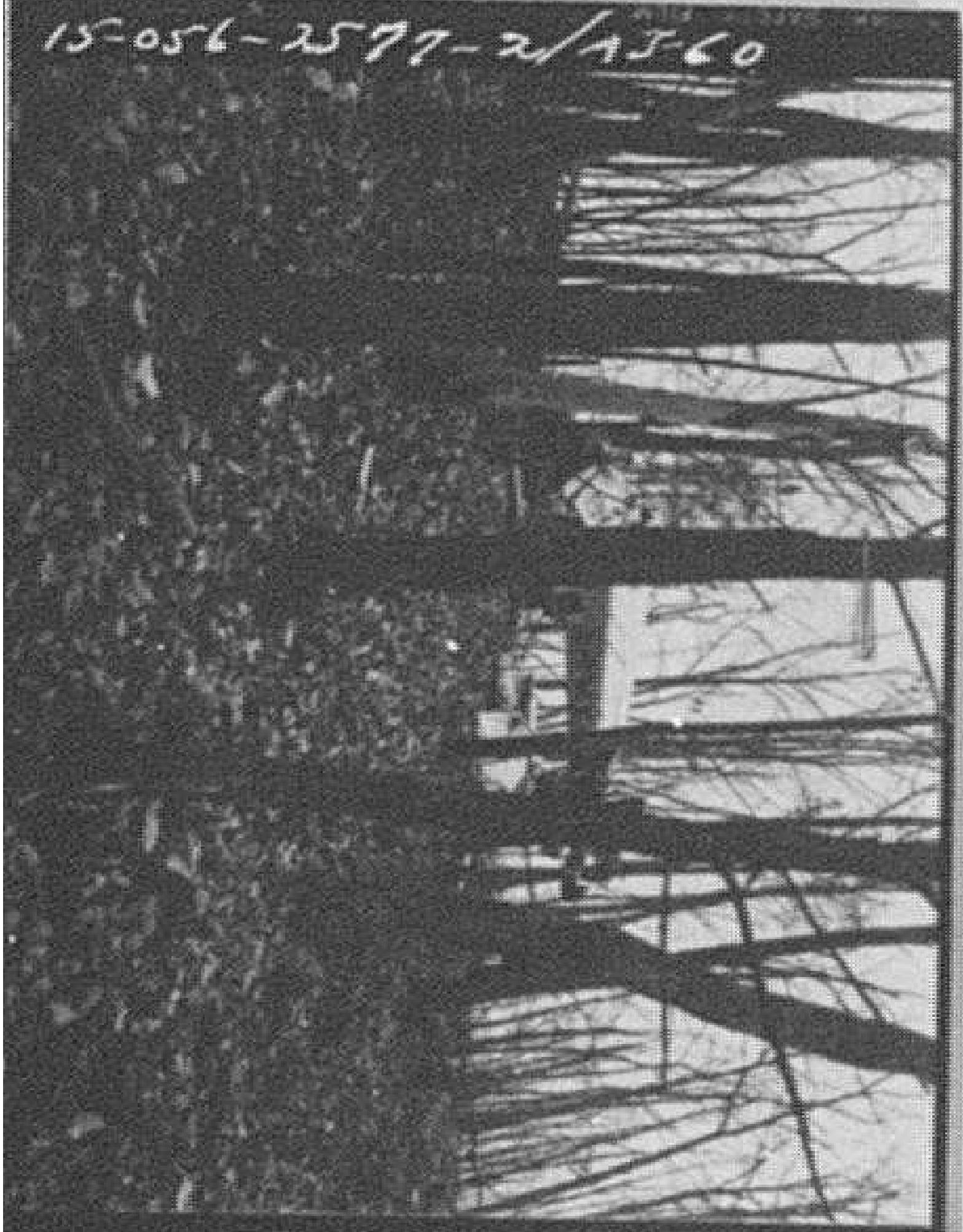


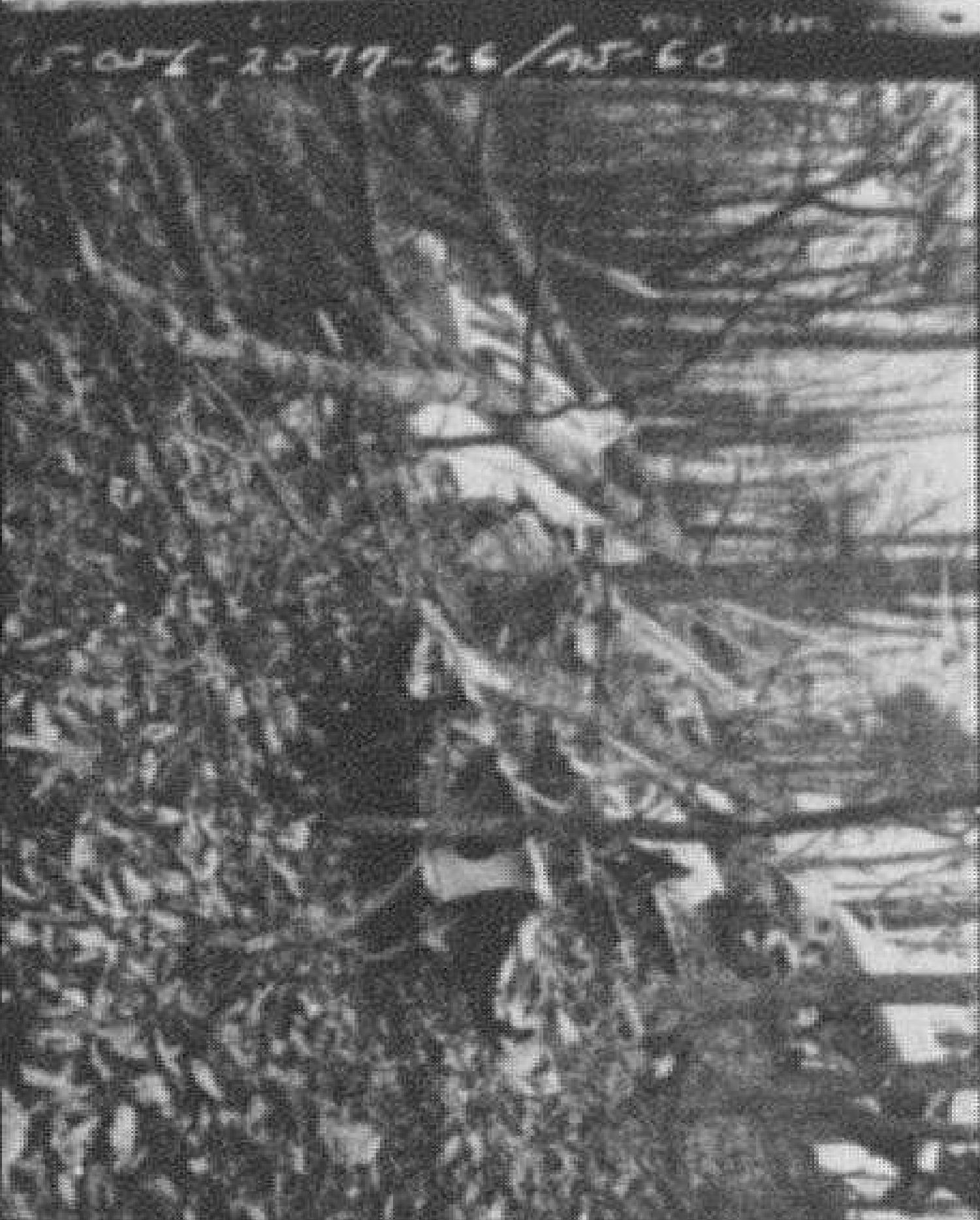
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107-654-2577-10 AJ-60



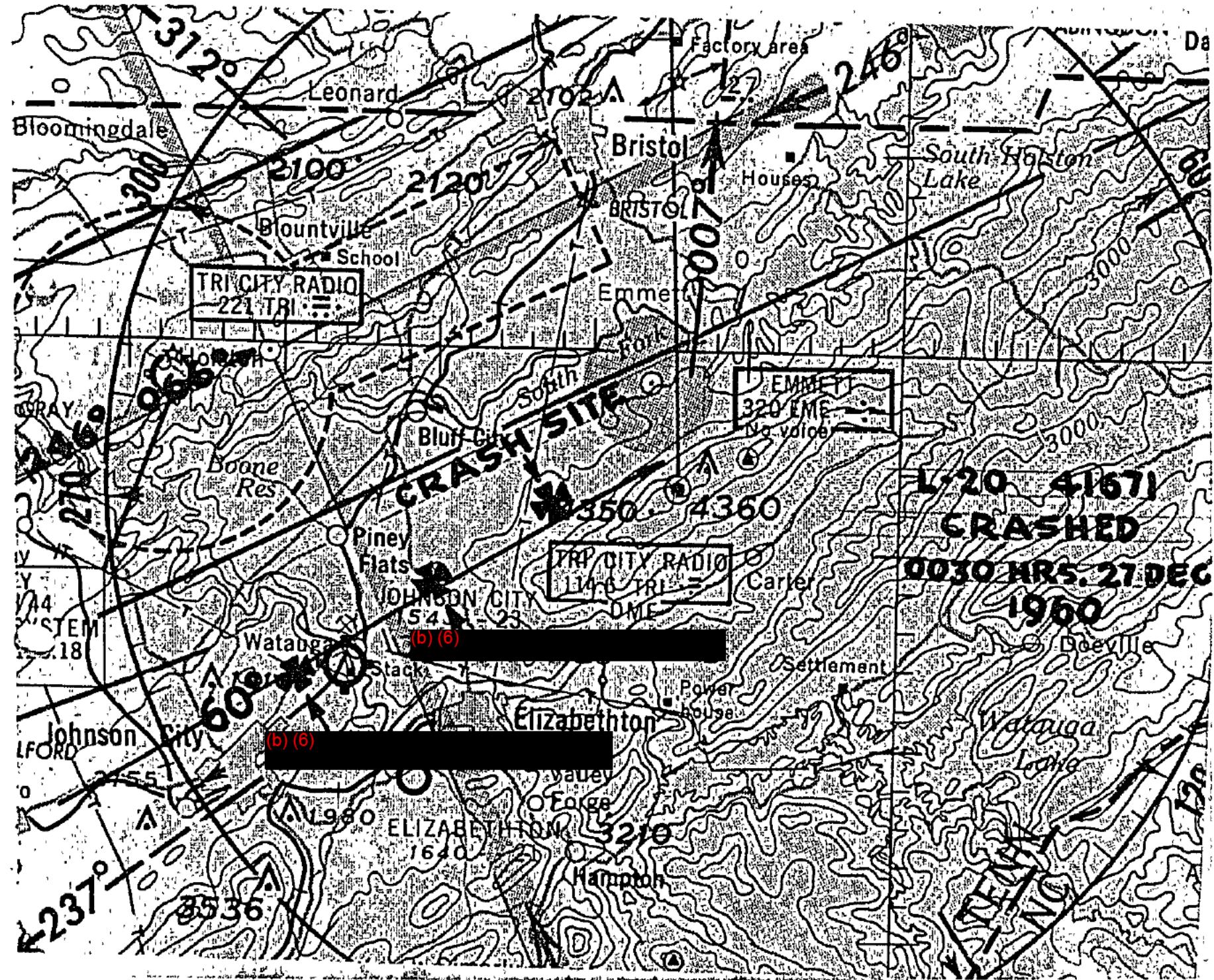


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15082-2577 - 4/45-60





UNITED STATES ARMY BOARD FOR AVIATION ACCIDENT RESEARCH  
HUMAN FACTORS SECTION

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ACDT NR 3018

MODEL 20A

DATE 27 Dec 60

---

Reviewed By:      Flight      Crash Inv.  
                    Surgeon      Analyst      Psychologist

---

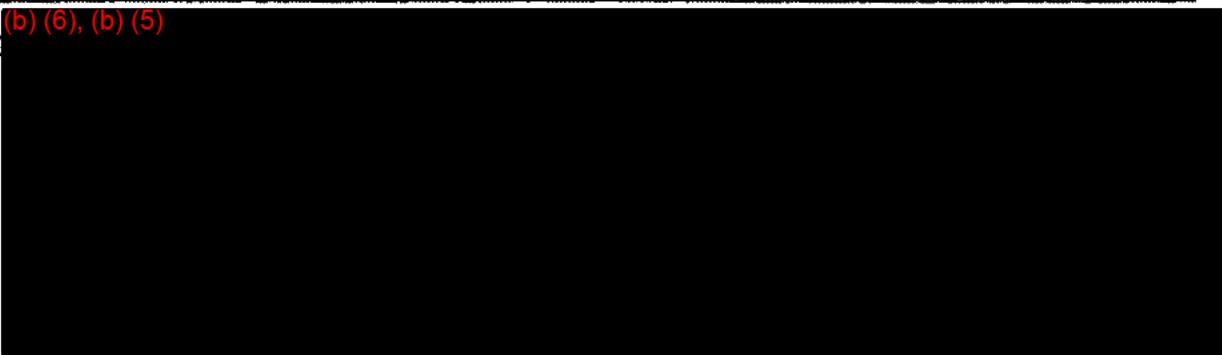
1. Psychological Factors:

2. Physiological Factors:

3. Crash Injury Analysis:

---

SUM



(b) (6), (b) (5)

2 Wcc

ARMY AVIATION SECTION  
Fort Bliss, Texas

S T A T E M E N T

I, the undersigned, was on duty the morning of December 26, 1960, at the time 1st Lt Donald G Bales filed out.

I had previously checked with the operations officer concerning the flight proposed by 1st Lt Bales and knew he had been authorized to make the flight.

At the time Lt Bales arrived to file, (b) (6), the operations sergeant on duty, was on duty behind the operations counter and I was in the rear office adjoining. While Lt Bales was talking over the plan 62, I overheard him say, "Yes, it is a long flight, but I intend to land if the weather changes and when I get tired".

I went into operations when he hung up and asked if the clearance officer had questioned something on his flight plan. He said, "No, just thought it was a long flight". I asked how long and he said his ETE was nineteen (19) hours. I said it was too long and his reply was, "It won't really be nearly that long. I planned three (3) one (1) hour fuel stops, plus I plan for a true air speed of only 100 knots and lightly loaded. 1671 is good for 120 knots, also I took no wind in consideration and I have at least a 15 knot tail wind forecast to hold. Time in the air should be about twelve (12) hours". I said I thought that was still too long, did flight service approve the flight? He said, yes, so I said, "Your flight order gives you five (5) days for the trip, you don't have to make it today. Will you stop when you feel tired?". He said he would and walked out of operations. The time then was approximately 11:10 hours, Mountain Time. I later saw him taxi out and knew the operations sergeant had activated his flight plan. The time then was approximately 11:15 hours Mountain Time. (END OF STATEMENT)

(b) (6)

Z. MURK

**STATEMENT**

(SR 190-45-1)

Explain the nature of the investigation. If deponent is accused or suspected of an offense he must be so informed and this fact affirmatively shown.

PLACE <b>ARMY AVIATION SECTION, Fort Bliss, Texas</b>	DATE <b>29 December 1960</b>	FILE NO.
DEPOSITOR (Last Name—First Name—Middle Initial) <b>(b) (6)</b>	SERVICE NO. <b>(b) (6)</b>	GRADE

ORGANIZATION<sup>4</sup> (If deponent is a civilian, give address)

**A Btry, Eq Bn, USAADCEN, Fort Bliss, Texas**

**TO BE COMPLETED PRIOR TO MAKING STATEMENT**

THE UNIFORM CODE OF MILITARY JUSTICE, ARTICLE 31, AND THE FIFTH AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES (Strike out only if person making statement IS a member of the Armed Forces) (HAS) BEEN READ TO ME AND MY RIGHTS THEREUNDER HAVE BEEN EXPLAINED TO ME BY **(b) (6)** WHO INFORMED ME THAT HE IS (A) **Commissioned Officer**

OF THE UNITED STATES (ARMY) **Officer** HE HAS INFORMED ME THAT THIS STATEMENT IS BEING TAKEN IN CONNECTION WITH THE INVESTIGATION OF **An Army Aircraft Accident**.

(Strike out words between brackets, if inapplicable). THE FOREGOING HAVING BEEN EXPLAINED TO AND BEING UNDERSTOOD BY ME, I VOLUNTARILY MAKE THE FOLLOWING STATEMENT.

**(b) (6)**

STATEMENT BEGINS<sup>5</sup> **(b) (6)**

On 26 December 1960, I, **(b) (6)** was the duty dispatcher in Operations of the Fort Bliss Aviation Section. I reported for duty at 0730 hours and reported to **(b) (6)** the duty officer that day.

At approximately 1030 hours 1st Lt Donald G Bales arrived at the Aviation Section hangar and came up to the Operations Section.

Lt Bales greeted both **(b) (6)** and myself and stated that he had clearance from **(b) (6)** the Operations Officer, to make a flight in an L-20, to Fort Belvoir Virginia. He requested a flight order which I typed up. I left the flight order in the typewriter and looked for Lt Bales to find out if any one was going with him. Lt Bales had left the Operations Area and apparently was down stairs in the maintenance room.

I completed the signature blocks on the flight order and rolled the sheet back to list the crew members, if any, when Lt Bales returned. When Lt Bales returned, I asked if there were to be any others listed on the flight order. He stated that there would be none from Fort Bliss, but that he was going to pick up some passengers at Love Field, in Dallas, Texas and that I should leave the spaces blank. I pulled the flight order from the typewriter and brought it out and put it on the counter in the Operations Area.

Lt Bales in the meantime, was preparing his 175 flight plan for his trip. When he completed the 175, he handed it to me and asked me to file it with flight service, requesting Notams, weather and clearance. The remarks were not clear on the 175 and I questioned Lt Bales on them. He then instructed me to tell the flight service operator that he would have: a one (1) hour passenger and fuel stop at Love Field, Dallas; a one (1) hour fuel stop at Memphis, Tennessee and a one (1) hour fuel stop at Tri-Cities Airport.

I then filed the flight plan in the usual manner stating as I started that it was being filed for Notams, weather and clearance. To the best of my recollection, I filed

EXHIBIT

DEPOSITOR'S INITIALS

**(b) (6)**

Page 1 of 3 Pages

**OFFICER** **CLERK**

\* Additional pages must contain the heading "STATEMENT OF \_\_\_\_\_ TAKEN AT \_\_\_\_\_ DATED \_\_\_\_\_ CONTINUED." The bottom of each additional page must bear the initials of the person making the statement and be identified as "PAGE \_\_\_\_ OF \_\_\_\_ PAGES."

STATEMENT (Continued)  
Remarks as stated above.

While I was filing the flight plan I noted that Lt Bales had not listed the radio call and type of aircraft that I had assigned to the flight, however, I gave this information to the operator at flight service. I mentioned this to Lt Bales a few minutes later. I believe he was about to fill this information in on the 175 when the flight service Notams clerk called on the Plan 62 line. I picked up the phone, answered it and handed it to Lt Bales. He talked briefly with the Notams clerk then handed me the phone and I placed it in its cradle. Lt Bales remarked that there was only one Notam for such a long flight. He mentioned what it was and where it was, but I do not recall just what he stated fully.

I started to write up the flight on the outbound log when the weather forecaster called. Lt Bales saw I was busy and picked up the plan 62 phone and answered it. He received his weather briefing and continued talking on the plan 62 line. I assumed that he was talking to the clearance officer for I recall him stating that he realized that it was a long flight and that he would set down if he got tired. When he completed his conversation he put the phone back on its hook. He handed me the original of his 175. I looked it over and asked if the initials he had put on it were the initials of the clearance officer. He stated they were, and that he was cleared to go. He then went back to the briefing room for a short time.

Lt Bales came back to the Operations counter picked up his flight order, flight plan and some other papers he had there. He told me that he was going to take (b) (6) (b) (6) case with him for his (Lt Bales) was not complete, and he would need a complete one for such a long flight.

(b) (6)

AFFIDAVIT BY DEPONENT

HAVE HAD READ TO ME (HAVE READ) THIS STATEMENT WHICH BEGINS ON PAGE ONE (1) AND ENDS ON PAGE 3. I FULLY UNDERSTAND THE CONTENTS OF THE ENTIRE STATEMENT. I HAVE INITIALED ALL CORRECTIONS AND HAVE INITIALED THE BOTTOM OF EACH PAGE WHICH CONTAINS STATEMENT MATTER. THIS STATEMENT WAS MADE BY ME FREELY WITHOUT HOPE OF BENEFIT OR REWARD, WITHOUT THREAT OF PUNISHMENT, AND WITHOUT COERCION, UNLAWFUL INFLUENCE, OR UNLAWFUL INDUCEMENT.

(b) (6)

SWORN TO AND SUBSCRIBED BEFORE ME THIS 30 DAY OF Dec 60 AT (b) (6)

WITNESSED BY:

RIGHTS UNDER UCMJ, ARTICLE 31, AND THE FIFTH AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES

No person subject to this code shall compel any person to incriminate himself or to answer any question the answer to which may tend to incriminate him. No person subject to this code shall interrogate, or request any statement from, an accused or a person suspected of an offense without first informing him of the nature of the accusation and advising him that he does not have to make any statement regarding the offense of which he is accused or suspected and that any statement made by him may be used as evidence against him in a trial by court-martial. No person subject to this code shall compel any person to make a statement or produce evidence before any military tribunal if the statement or evidence is not material to the issue and may tend to degrade him. No statement obtained from any person in violation of this article, or through the use of coercion, unlawful influence, or unlawful inducement shall be received in evidence against him in a trial by court-martial.

The fifth amendment to the Constitution of the United States provides that no person shall be compelled in any criminal case "to be a witness against himself."

DEPONENT'S INITIALS (b) (6)

MENT OF (b) (6) TEXAS DATED 29 DECEMBER 1960 CONTINUED.

TAKEN AT FORT BLISS,

Lt Bales then departed and I next noticed him pre-flighting his aircraft which was parked right beside the hanger. A few minutes elapsed and I heard the aircraft being started. A short time later he started to taxi towards the strip.

(b) (6)

At this time the phone rang and a (b) (6) called stating he just received word his father died and wanted to know if we had any flights going East. I told him of Lt Bales flight and stated I would have the Biggs tower operator ask Lt Bales if he would delay for an emergency passenger. I called the tower operator with above information and I could see the aircraft piloted by Lt Bales turn around and start back to the Aviation Section.

(b)

I informed (b) (6) that the aircraft was returning, advised him to start action on getting emergency leave approved and recorded his quarters phone number. Lt Bales parked the aircraft just next to the hangar. He alighted from the aircraft and came up to the Operations Area. I gave him the details of the phone call. He (Lt Bales) stated that it would take more than an hour for the (b) (6) to get his leave approved and ready to go and asked me for his phone number which I gave him. He called the (b) (6) using phone 24207, on the counter. I heard Lt Bales explain on the phone that it would be at least a day and one half getting to the east coast for he would have to set down that night, probably at Trinity Airport. He also stated that he could be held up due to weather anywhere along the way. Lt Bales terminated the phone conversation and told me the (b) (6) would be going by commercial air, and that he (Lt Bales) would continue as planned. He then departed and in a few minutes was taxiing up to the strip. I notified the tower operator that he was on his way up again. In a few minutes the tower operator called me his time off was 29 after the hour (1F29). I recorded the 29 in red on the outbound log.

Several hours later (approximately 1500 hours Mountain Time) I received a call from the flight service operator stating that the one (1) hour PAX stop at Love Field was cancelled on aircraft 1671. I adjusted the STA on the out-bound aircraft log to account for this hour.

No further action took place on this flight during my tour of duty.

(b) (6)

PAGE 3 OF 3 PAGES

2 MRC

**STATEMENT**  
(SR 190-45-1)

Explain the nature of the investigation. If deponent is accused or suspected of an offense he must be so informed and this fact affirmatively shown.

PLACE <b>ARMY AVIATION SECTION, Fort Bliss, Texas</b>	DATE <b>29 December 1960</b>	FILE NO. [REDACTED]
DEPOENT (Last Name—First Name—Middle Initial) <b>(b) (6)</b>	(b) (6)	

ORGANIZATION (If deponent is a civilian, give address)  
**A Btry, Hq Bn, USAADCEN, Fort Bliss, Texas**

**TO BE COMPLETED PRIOR TO MAKING STATEMENT**

THE UNIFORM CODE OF MILITARY JUSTICE, ARTICLE 31, AND THE FIFTH AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES (Strike out only if person making statement IS a member of the Armed Forces) (HAS / HAVE) BEEN READ TO ME AND MY RIGHTS THEREUNDER HAVE BEEN EXPLAINED TO ME BY [REDACTED] (b) (6) WHO INFORMED ME THAT HE IS (A) (AN) **Commissioned Officer** OF THE UNITED STATES (ARMY / NAVY / AIR FORCE). HE HAS INFORMED ME THAT THIS STATEMENT IS BEING TAKEN IN CONNECTION WITH THE INVESTIGATION OF **an Army Aircraft Accident.**

(ACCUSED / SUSPECTED) (Strike out words between brackets, if inapplicable). THE FOREGOING HAVING BEEN EXPLAINED TO AND BEING UNDERSTOOD BY ME, I VOLUNTARILY MAKE THE FOLLOWING STATEMENT.

(b) (6)

STATEMENT BEGINS:

On 26th day of December 1960, I, (b) (6) came to the Army Aviation hangar with (b) (6) to assist him in getting the aircraft, which were scheduled for flight, ready.

At approximately 1030 hours, 1st Lt Bales arrived at the hangar and asked me if I would bring the aircraft (L-20, 54-1671) in front of the Operations door. At this time I went on the line and pre-flighted the aircraft, then taxied the aircraft to the runup area and gave it a thorough runup. On runup, I checked the engine and found the left magneto had 50 RPM drop and the right magneto had 75 RPM drop. I checked all instruments and found them to be operating properly. I then taxied the aircraft back to the front of Operations and refueled it to be sure that all tanks were completely full. It took 56.7 gallons of gas to top all tanks off. Then I reported the aircraft ready for flight to Lt Bales who was in Operations filing his flight plan. After he had completed his flight plan he came to the aircraft and loaded his baggage and then pre-flighted the aircraft and also made an inspection of all lights and instruments and an engine runup check. He said everything was working fine. I asked him if he would like for me to take the excess parachutes in the plane out and he said no because he was going to stop in Dallas, Texas to pick up some passengers. At this time he taxied out for take off but was called back before take-off, due to a man wanting to go on emergency leave. He came back to operations where he called the person wishing to go on leave. After talking to the person he told me and the C.Q., that the person going on emergency leave decided to go by commercial transportation. So he went back and took off in the airplane alone. He took off at approximately 11:30 hours local time (b) (6)

EXHIBIT

1 of 1 Pages

<sup>1</sup> Additional pages must contain the heading "STATEMENT OF \_\_\_\_\_ TAKEN AT \_\_\_\_\_ DATED \_\_\_\_\_ CONTINUED." The bottom of each additional page must bear the initials of the person making the statement and be identified as "PAGE \_\_\_\_ OF \_\_\_\_ PAGES."

STATEMENT (Continued)

AFFIDAVIT BY DEPOENT

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(b) (6)

(b) (6)

SWORN TO AND SUBSCRIBED BEFORE ME THIS 29 DAY OF Dec 19 60 AT \_\_\_\_\_  
WITNESSED BY:

(AUTHORITY TO ADMINISTER OATHS)

RIGHTS UNDER UCMJ, ARTICLE 31, AND THE FIFTH AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES

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DEPOENT'S INITIALS

Page 2 of 2 Pages

(b) (6)

A TRUE COPY

ACPT NO.	TYPE	FROM	ABR NTE	ETO	STC
	ETR		DAP	1R15	19400
DAL 10-15 + K 10+15			DAP 1004 YRD 105 F 012		
MEM 1000 10-12 00003					
MIN CLR HGT - DCA AT 1000 FT	MAX CLR TOPS 20,000 FT MSL	DUST ON HAZE	SMOKE	RAIN	HAIL
MIN VIS AT FLT LVL 5 MILES ZERO IN BLOCK	ICING 1000 FT MSL		FROZEN PRECIP 1000 FT MSL	SNOW	FOG
SFC					BRIEFING VOID
ROUTE WINGS					1900
AIR MSL / Degrees true / Km					
1000 000 000 000					
ICING ON CLIMB					
ON DESCENT					
FLIGHT SERVICE: <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> ACKNOWLEDGES FLIGHT PLAN					
ONLY IF: <input type="checkbox"/> ACPT EQUIP FOR TYPE OF FLT <input type="checkbox"/> FLY PLN, ETC, FUEL AND COMPUTED IAW ACPT-1 AND FORECAST MINORS					
<input type="checkbox"/> OFF BUSINESS <input type="checkbox"/> WITH WRITTEN ORDERS <input type="checkbox"/> TO PILOTS H/S					
<input type="checkbox"/> TOR COMPUTED RUNWAY ADEQUATE					
SPECIAL BRIDGING STRAIN <input type="checkbox"/> DRAWN OUT AT CLAR AT NOTAMS ISSUED					
SUGGEST: FILE					
ADDITIONAL REMARKS:					
TRI 1003 F 10					
AACS FORM 175-17d					
AACS FLIGHT SERVICE CLEARANCE BRIEFING					

)  
DUPLICATE COPY

VFR R 41671 L20 100 BIF/R DAL MEM TYS DAA ASMD 1815

1900 NR 0600 UHF ALL BALES 33 RMKS 0100 FUEL STOP DAL  
0100 FUEL ITEM 0100 FUEL STOP AT TRI

STATEMENT

On Sunday morning, 25 December 1960, prior to and including 1800Z hours, I was the Duty Forecaster in the Carswell Military Flight Service Center. I gave the form 175 weather briefing to the pilot of Army L-20, serial number E-41571 for a flight from Fort Worth, Texas (BIF) to Davison Army Air Field, Md., (DAF). The flight plan called for a nineteen (19) hour flight which included three (3) fuel stops (one(1) hour each at Dallas, Memphis and Tri City Airport, Texas).

In the general discussion of the weather along the route, from the 24/1500Z surface map and the 26/1500Z nephogram, the pilot was informed of the cold frontal system extending from central Texas into Ohio and the secondary cold frontal system immediately behind it which at that time was orientated through Missouri-Northward into a low pressure center just east of Lake Huron. These systems were moving northeast while the low center was moving northward. The 26/1500Z nephogram indicated instrument conditions prevailing from the Gulf of Mexico up the Appalachians to Pennsylvania. Beginning at Fort Worth, the pilot was told that he would have VFR conditions with only scattered clouds to Dallas. On the Dallas to Memphis leg, he was told to expect the cirrus to dissipate and between Pine Bluff and Memphis ceiling would run 3000-foot broken variable to scattered. The pilot was briefed that the leg from Memphis to Tri City Airport would be marginal VFR conditions due to low ceilings and fog. He was advised, that if VFR flight could not be maintained, his best alternate would be to return to Fort Worth to Nashville or Memphis. At this time he was further advised to be sure and check the weather enroute before departing Memphis. The pilot commented that he would probably terminate the flight at Memphis. On the leg from Tri City Airport to Davison AAF, the pilot was briefed that, that the weather

STATEMENT

would probably furnish enough braking action to slow down the frontal movement and that instrument or very marginal VFR conditions would prevail throughout this area for the rest of the night. He was advised to turn Southeastward to Langley AFB, Va or return to Tri City Airport if VFR flight could not be maintained.

At this point I told the pilot, "I would not make this lengthy flight into those weather conditions." He answered, "When I get tired, I'll stop, probably Memphis or Tri City."

I then proceeded to furnish the pilot with form 175 forecast for his final stop and destination as indicated on the attached form 175.

Concerning the hazards of flying in the form 175, the pilot was given no warning; however, he was informed that if he changed to IFR, he could expect moderate to heavy icing in clouds between Tri City Airport and Washington D.C. area.

The flight altitude winds were provided only from BIV to DAL. The pilot said that he would check winds aloft at each fuel stop.

I certify that the statements contained herein are true and correct to the best of my knowledge and belief.

(b) (6)

OFFICE

2048TH AIRWAYS AND AIR COMMUNICATIONS SERVICE SQUADRON (MATS)  
UNITED STATES AIR FORCE  
Carswell AF Base, Texas

S T A T E M E N T

28 December 1960

As requested by (b) (6), Division Aviation Section, 101st Airborne Section, Fort Campbell, Kentucky, who has been appointed investigating officer in the crash of Army 41671, the following statement is submitted.

I was acting as clearance authority at Carswell Military Flight Service on 26 December 1960. The flight plan on R41671 was received in this center at 1743Z. The flight plan shows the aircraft flying 100 knots true airspeed, departing Biggs Air Force Base, flying direct to Dallas, Memphis and McGee Tyson with final landing at Davison Army Air Field. The flight plan shows total time enroute of 19 hours with aircraft carrying 6 hours fuel. Fuel stops were to be made at Dallas, Memphis and Tri City. There were no NOTAMS on file that would affect the flight. Davison Field NOTAMS Number 001, 002, 008, and 010 were read to the pilot for his information. None of the NOTAMS showed any hazard to an Army Combat Readiness flight under VFR conditions.

The Flight Service weather briefing given verbally to the pilot, and placed on file here, shows the following forecasts; Dallas high scattered clouds with 15 miles visibility, wind NNE 10 to 15 knots, Memphis 3 thousand and broken, visibility 10 miles, wind ENE 12 knots, Tri City, 1 thousand, overcast, visibility 3 miles with fog, wind ENE 10 knots, and Davison Army Air Field, 1 thousand, overcast with layered high broken clouds, visibility 5 miles, with fog, wind SW 12 knots. The minimum ceiling for the entire route was forecast to be 1 thousand feet in the Tennessee and District of Columbia area with at least 5 miles flight visibility at all times. The winds at requested flight level of 10,000 feet were forecast to be 270 degrees at 25 knots from Biggs Air Force Base to Dallas.

The pilot was requested to check wind for the rest of the route when refueling at Dallas.

On long Army flights of this type in small aircraft, the forecaster also informs the pilot to recheck the weather at his refueling or passenger stops to keep abreast of any possible changes. During the weather briefing for this flight the forecaster did outline that this was quite a long flight. At this time the pilot said that if he got tired he would stop at either Memphis or Tri City.

U. S. AIR FORCE

After reviewing the forecast weather for the route and landing terminals it appeared that the flight could be made under VFR conditions. The pilot stated that he was familiar with the weather and NOTAMS and the flight was approved. There was no hesitation on the part of the pilot to commence this flight and from the sound of his voice he seemed anxious to get going.

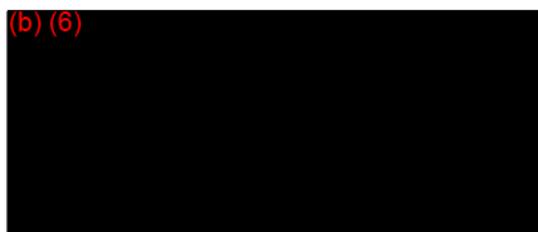
When passing Abilene the pilot elected to cancel his stop at Dallas. This change was received from Dyess Air Force Base at approximately 2116Z and the aircraft continued on to Memphis for a refueling stop.

This Center regularly receives Army Combat Readiness flights of long duration from outlying military airfields and civil airports in the southwestern area. These extended flights received on Army Aircraft vary from twelve and fourteen to sixteen hours duration with three and four refueling stops. Many flight plans are also received where the same pilot and aircraft has filed four or five flights with a duration of two to four hours per flight during the same day. Army personnel have stated that these flights are necessary to their mission.

From the time of takeoff at 1829Z to the time of last contact over Tri City for landing instructions at 0527Z approximately eleven hours had elapsed. With a minimum of one hour on the ground at Memphis the flying time would be approximately ten hours.

The flight plan as presented by the pilot for approval complied with ceiling and visibility limitations outlined in Army Aviation Directives furnished to this Center.

(b) (6)



28 December 1960

MEMORANDUM FOR RECORD

In order to be of possible assistance to the members of the board investigating accident of L-20, 541671, a call was placed by the undersigned to Flight Service Center to determine the last airport at which above aircraft landed. Flight Service provided that information and the name of the dealer who serviced subject aircraft upon its landing at Memphis Municipal Airport.

A further telephone call to the Memphis Aero Corp located on the Municipal Airport, Memphis, Tenn. connected me with the person who performed the service of last refueling the L-20. Following is a direct quote of the conversation which took place on 28 Dec 60 on or about 1400 hours between myself and (b) (6) :

(b) (6) : This is (b) (6), 101st Airborne Division, Fort Campbell, Kentucky. We have been given the job of investigating accident of Army L-20, 541671 on night or early morning hours of 27th. We have reason to believe that he was refueled at your station.

(b) (6) Yes sir, that's right.

(b) (6) : Before you go any further I would like to know how to spell your name and state that I have a stenographer copying this conversation.

(b) (6) : (b) (6)

(b) (6) And your duty?

(b) (6) : I'm a line man.

(b) (6) And correct name of organization?

(b) (6) : Memphis Aero Corp.

(b) (6) : Now, if you would speak slowly so that the stenographer can copy what you are saying I would appreciate your telling me all you remember.

(b) (6) : If I remember correctly it was 7:30 on that evening - it was approximately 7:30 - between 7:30 and 8 o'clock that he arrived. I waved him in on to the ramp and he got out of the airplane and he told me he wanted all three fuselage and two tip tanks filled - 50 weight oil 1 inch below filler mark on dip stick. I refueled airplane with 80 octane gasoline and pump needle reading was 87.8 gallons.

(b) (6) : And this total was put in to the three main tanks and 2 tip tanks?

(b) (6) Yes sir.

OFFICER

(b) (6) : This total was all that was required to fill all tanks?

(b)(6) : Yes sir. I personally did not check oil. We had another man, (b)(6), and he said the oil was at level required.

(b)(6) : Did the pilot eat while at Memphis?

(b)(6) Yes sir. He ate at Dobbs House in the Terminal Building at Memphis Municipal.

(b)(6) Do you by chance know what he did eat?

(b)(6) : No sir.

(b)(6) Did he appear to be sleepy, tired, or fatigued?

(b)(6) : No sir. I noticed he had a parachute on and everything seemed to be normal. I've had experience with military aircraft and everything seemed normal to me. He had parachute on; got out of parachute; got out of plane. Everything seemed normal.

(b)(6) You could tell from ground that he did get out of his parachute before getting out of airplane.

(b)(6) : I took particular notice of this.

(b)(6) In your opinion he did not show any signs of fatigue.

(b)(6) : No sir. I would say none at all. He asked me where he could eat and I told him. He stood in office; I told him where he could eat; he went to Dobbs; came back approximately one hour later. He signed the credit card. I told him how much gas he took, oil level, everything. (b)(6) went out with him, pulled chocks on airplane and we heard him take off.

(b)(6) You don't recall time of take off.

(b)(6) : No sir. Tower could give us that though.

(b)(6) : Have you another phone so you could get it while I'm talking to you?

(b)(6) : Yes sir, wait a second. ..... Sir, she is calling tower now. They have a recording and might have to rewind recording.

(b)(6) : If we have to wait an extended period I will call back. If there is anything else you think might help us in trying to determine cause of this accident. . .

(b)(6) : No sir, airplane and everything . . . . didn't seem to have any trouble. Engine sounded good when he taxied up. I was actually shocked when I heard news. I know all tanks were full right to top, all filler caps were on tight. I couldn't tell about oil, that was another man that did that.

(b)(6) : Would you know whether or not he made any type of pre-flight after fuel and oil tanks had been filled.

(b)(6) : No sir. I don't think he did. Not type of pre-flight we held in Navy. It wasn't up to our standard of pre-flight.

(b)(6) : Do you think he checked fuel caps to insure that they were there and on tight?

(b)(6) : No sir.

(b)(6) : Is there any way he could have checked weather?

(b)(6) : Yes sir. I think he did check weather. I don't know whether he got it from where he had been before but he left weather report on desk here.

(b)(6) : Do you know what weather report said?

(b)(6) : No sir. I did not read it. I just noticed it was here. It was here when I left that night but it is not here now.

(b)(6) : Do you believe this to be a weather report which he obtained while on the ground at Memphis?

(b)(6) : Yes, I think so otherwise he would not have brought it in here. It was not here until he came back from Dobbs House and I think he must have checked the weather while he was at the terminal building.

(b)(6) : Was weather facility located within terminal building?

(b)(6) : Yes sir, and it was a regular weather report that comes off the teletype.

(b)(6) : Is there anything else . . .

(b)(6) : I was thinking about it last night but I can't actually think of anything that would help you.

- - - -

(b)(6) : The time of take off was 8:44.

ALL INFORMATION CONTAINED  
HEREIN IS UNCLASSIFIED

(b)(6) : That's Memphis time?

(b)(6) : Yes sir. He filed VFR flight plan to Washington, D. C.

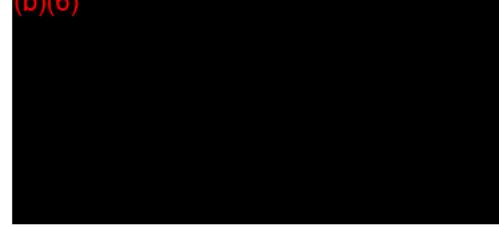
(b)(6) : He filed from Memphis to Washington?

(b)(6) : Yes sir.

(b)(6) If I need it, can I obtain a written statement to the extent of this telephone conversation?

(b)(6) : Yes sir.

(b)(6)



OPTIONAL FORM NO. 10  
MAY 1962 EDITION  
GSA GEN. REG. NO. 27

30 December 1960

(b)(6)

Verbatim interview of [REDACTED] Tri-City tower operator at the time of accident, by (b)(6)

(b)(6) : What is your full name?

(b)(6)

(b)(6) : What time did you come on duty?

(b)(6) : 2100 hours, 26 December.

(b)(6) : Would you insert the parts of the missing conversation that were left out of the tape that belong to the subject aircraft, Army 541671.

Tape (Tower): Army aircraft calling Tri-City, go ahead.

*20 Southwest at 6000*

(b)(6) : He said, "This is Army 54-1671. Request Tri-City weather."

Tape (Tower): 4500 scattered 3 miles in ground fog, visibility east 3/4's. Over.

(b)(6) : He said, "671. Roger."

Tape (Tower): 671 you landing Tri-City?

(b)(6) : 671 said, "Roger."

Tape (Tower): Are you a VFR flight?

(b)(6) : He said, "Roger."

Tape (Tower): Roger. Contact Tri-City tower about 10 out.

(b)(6) : 671 Rogered this transmission.

Tower transmitted on frequencies 255.4 and 257.8 to Army 54-1671 several times following this but received no further answer.

These transmissions occurred between hours of 0027 and 0045. Initial contact was made with R54-1671 at 0027 Eastern Standard Time.

(b)(6) : Did you specify frequency to contact tower on?

(b) : No.

(b)(6) : Why didn't you get initial identification?

(b)(6) : He wasn't coming in clear on initial transmission, probably because transmitter was not warmed up.

(b)(6) : Why did you ask him if he was VFR?

(b)(6) : I normally ask aircraft whether they are VFR or IFR.

(b)(6) : Did you have any pilot reports about this time?

(b) : No pilot reports for a considerable period before and after this incident.

(b)(6) Would you have any idea of tops?

(b)(6) : Weather was clear with rough ground fog. While driving from home to the east I encountered rough ground fog. Ground fog will obscure hills in this area and it is possible to hit hills and think it was just fog.

(b)(6) : Could you see the tops of any hills sticking out of the tops of ground fog?

(b)(6) : It was rough ground fog and it was possible the fog was obscuring the hills.

(b)(6) : Are you familiar with just where the aircraft crashed?

(b)(6) : No.

(b)(6) Did anything in the pilot's voice or manner indicate that he was having any problems?

(b)(6) No. Everything appeared perfectly normal to me.

(b)(6) : What is your experience level?

(b)(6) I have been with FAA for 16 years; 19 years including military time.

(b)(6) offered following additional information:

He requested a flight plan from Flight Service after this and he received the flight plan at 0300 Eastern Standard Time.

He called Knoxville to verify Bales position at Knoxville.

At 0113E tower called maintenance, requested check of instrument let-down equipment and the check proved that everything was operating normally.

At 0225E (b)(6) advised the Sullivan County Sheriff and the Highway Patrol of the missing aircraft.

At 0323E tower advised the Bristol Civil Air Patrol of the missing aircraft.

(b)(6)



S T A T E M E N T

Dec. 30, 1960

Monday night (Dec. 26, 1960) about 12:20 AM. I was sitting in the front room watching television and I heard this airplane coming and it sound pretty low. I thought is was a twin engine at first. So I run to the back Door of the house and went outside to see what it was. When I got out side he was coming over. He looked to be about 800 ft at the time. I stood there and watched him till he went out of sight. He was on a heading 50° or 60° heading in a General direction of Holston Mtn. He went almost over Johnson City Airport and he never turned before he went out of sight. Well I went back in the house and then went to bed. I thought to myself that if he didn't turn he would evenuually hit the mountain at that altitude if he didn't hit a hill before he got there. I persumed he was on the omni since he was headed toward the mountain. Well I just hoped he would turn and go toward Tri-City before he got to the mountain. Well I went on to Bed and the next morning I woke up about 10:30 A.M. and turned the radio on and heard that an Army plane was missing well I knew that it was the plane I had seen about midnight so I tried to call (b)(6) and couldn't get a hold of him, so I tried to get a hold of (b)(6) who is in the C.A.P. and couldn't get him to answer. I went down to the airport about 12:00 P.M. (Tuesday Afternoon) and told (b)(6) about what I had seen, and he called Tri-City tower and asked them if they had any aircraft in the area at that time when I had saw him and they said no. So he told them that I had seen an aircraft at the time they last heard from the missing plane. They wanted me to tell them what I had saw and told them that I had seen an aircraft come over my house between 12:20 A.M. & 12:30 A.M. and that he was at an altitude of about 800 ft. and headed toward Holsten Mt. on at heading of about 50° or 60°. They said it sound good and would check it out. About 12:30 P.M. (b)(6) came in and I told him what I had saw and he said lets go check it out. So we took off and lined the tail of the airplane up with my house and we flew a heading of about 50° or 60° over the airport. We were about 3 miles out and (b) call the tower and told them what we were doing and they told us the search had been canceled and we flew to Tri-City. We were there till about 2:40 P.M., and one of the C.A.P. boys came in and said there had been a mistake and the search was still on. So we took off and back to Johnson City and got back on the course we were on before. We flew for about 8 minutes and (b)(6) spotted the wreckage on a knob about a half mile fror the Bristol-Elizabethton Highway at 3:06 P.M. We made several low passes and saw no survivor and we called Tri-City Tower and told them we had found the wreckage of the plane. They told us to report to Tri-City and tell the C.A.P. where the wreckage was and to led the C.A.P. airplane back to the wreckage. We done this and then flew back to Johnson City Airport.

On the Army Plane when it came across the house I didn't see any Rotating Beacon working on the Airplane. Most of that type Airplanes have them on the Back of the fuselage on a small pole. But there was any Rotating Econ on this airplane. All I saw was a red (Steady) light on the Right wing and a white tail light.

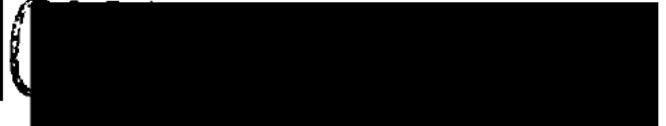
The weather at the time (12:20 A.M. & 12:30) was Partly Cloudly and the Moon was shining. There wasn't much fog if any.

(b)(6)



A CERTIFIED TRUE COPY

(b)(6)



S T A T E M E N T

accident  
Dec. 27 1960  
30  
statement made 30 Dec 60

To Whom it my concern: On the morning on Dec. 27.

I left work from Bristol Herald courier, Bristol, Va. at approximately 12:00 midnight. which I had completed my shift of work. I drive my own car and it was very foogy between Bristol, Va and Bluff City, Tenn. for at times I was down to 15 miles an hour. But after I left Bluff City to Elizabethton on Route 19E. The foog begin to lift some what. So I made a little better time.

Just after I crossed the Carter & Sullivan county line I notice a plane which looked as thought it had just missed the top of the ridge on my right. I am always looking about to see what is going on. I noticed it's lights on. The left wing had a red light and in center a white or amber light. It was a little foogy but not to bad in this area. I did not see any light on the Right wing. The plane was flying on a smooth course, but very low. In fact I didn't think it would get over the hill on my left. The plane was flying from my right to the left in the direction of the Holston Mountain. Nearly parallel with Sullivan and Carter county line. I rolled my glass down to see if I could hear the plane motor, it sounded very smooth and didn't seem to be having any trouble. I listen for a crash as it went over the ridge on my left, but heard none. This course was approximately 1/4 mile inside Carter county line and time approximately between 12:30 and 12:35, then I drove on home which is approximately 3 miles from where I had seen the plane. Put my car in the garage and went into the house. I looks at my kitchen clock and it was 12:45 A.M. Then I went to bed.

I got up about 8:00 A.M. and my wife and I had breakfast and was listening to the 9:00 a.m. news when I heard about the plane crash. I told my wife about seeing this plane and we wondered if it was the one I saw.

So at 10 A.M I was listening again to the news and they said [REDACTED] (b)(6)  
(b)(6) had reported a crash in the area next to his house. I knew (b)  
(b)(6) personally for I have known him and his family for years. So I figured the plane I saw was the one he had heard crash. So my wife and I checked to report what I had seen, thincking it might help locate the plane. So I called the Sheriff office and reported it to them.

Then my wife and I went to her Mother and the grocery store and returned home about 1 P.M. had dinner and I laid back down to take a nap before I went to work. At approx. 3 o'clock a (b)(6) for the C A P woke me up to relate my story again. Then I went to work at 4 P.M. While on my way to work the interrupted the program on my car radio saying they had found the plane.

(b)(6)

[REDACTED]

How far could you see horizontally: misty - no driving hindrance

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(b)(6)

[REDACTED]

ALL INFORMATION CONTAINED

[REDACTED]

S T A T E M E N T

30 Dec 60

On the Morning of Dec 27 I was in bed I heard a plane Which sounded very Near and low I got up and Went to the Porch I heard the plane a few seconds then a Crash Which was not to loud. I did not hear the plane after the noise of the Crash. I went back and he looked at My clock I took the time then to be 12:20 I went back to bed thinking if the plane would be in contact with the airport I got up at 5:30 turned in W.B.E.J. and did not hear any new. On my way to work I picked up a (b)(6) who told me a plane was down in the Tri-Cities area I told him then I was convinced I heard the plane go down. I went on to my gate and to the office and told (b)(6) what I had heard and requested he nofty the police dept. or rescue Squad this was about 6:30 at 8:00 A.M. I ask him if he had reported it. he said he was waiting to see if he could hear anymore about. So I went then to the Gate and ask the guard (b)(6) to report it and he did. About 12:30 the C.A.B. Men call me out to gate No 1. and I told them what I had heard where I lived and told them to go there and see how far they thought the crash could be heard I got off at 3:00 p.m. Came home and seen the plane before I got out of the car so (b)(6) who I came from work with and my self went to the site no one was there we waited for the C.A.B. crew then left shortly after.

What was the weather like at the time you heard the Airplane?

The weather was rather cold about freezing wet and very foggy visibility very poor about 300 yds a few breaks in clouds directly over head.

What did the Airplane Sound Like?

The plane sound like a plane coming for a landing running smooth or compare w\_th the running of a car down grade or under no strain or load.

(b)(6)



A CERTIFIED TRUE COPY

(b)(6)



OPTIONAL FORM NO. 3507-3  
MAY 1962 EDITION  
GSA GEN. REG. NO. 27, 14 CFR PART 101



S T A T E M E N T

December 30, 1960

Upon reaching my office Tuesday morning 12-27-60 I was advised by a co-worker that an aircraft was reported missing in the Tri-Cities area. I phoned the combined Communications station and was advised that an alert was in progress but weather conditions were expected to clear about noon to permit a standard CAP Search procedure and that my aircraft and services would be welcome at that time.

At about 1230 E hrs I arrived at Johnson City airport to pick up my plane and met with (b)(6) of Johnson City who told me of having seen an aircraft at "less than 1500' above ground" at about 2430 E hrs the previous night which he had reported to Tri-Cities Comm station that morning. I asked (b) then to accompany me as an observer and asked if he had a course bearing. He pointed out landmarks which gave a course of approximately 050° magnetic from Johnson City airport.

I called Tri Radio at approximately 1300 hrs E and advised that I had the boy with me who had made the sighting and that I was proceeding on the course he had given me before checking in with CAP at Tri Cities. Tri Radio advised me that the alert had been cancelled and I turned off to Tri Cities and landed.

At approximately 1440 hrs E a cadet advised those of us in the lounge that the cancellation was in error and that the search should be continued. I then suggested to (b)(6) of the CAP that I take (b)(6) and continue our search on the course he had lain. After receiving an OK (b)(6) and I were airborne in my Cessna 120 N77228 at 1450 hrs E for Johnson City. Over the city we again picked up the 050 heading over Johnson City airport. In about 5 minutes at 1501 hrs I sighted the plane on a hilltop at about 2150' NSL and proceeded to make several low passes and saw no sign of a survivor. I called Tri Tower at 1506 hrs E and informed them. They asked that I return and report to CAP. I made several turns about the aircraft to make the best possible position estimate which I gave as on the 260° radial of the omni and about 10 miles N.W. of Johnson City airport.

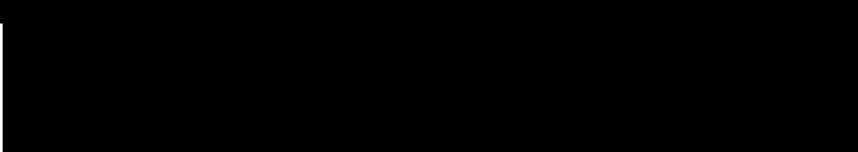
After returning to Tri Cities Airport I led the CAP Bonanza to the scene and returned to Johnson City Airport and picked up my car and proceeded to the crash site via the roads we followed into Johnson City. The CAP ground units were on the scene when we arrived.

(b)(6)



A CERTIFIED TRUE COPY

(b) (6)



S T A T E M E N T

SUBJECT: Weather Concerning Army L-20, 54-1671

1. Altimeter Settings-From the data listed below, the greatest altimeter error due to changes in air pressure would be 00.13 inches (Approximately 130 feet).

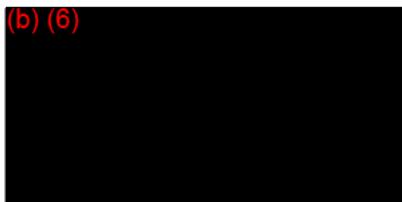
<u>LOCATION</u>	<u>APPROXIMATE DEPARTURE TIME</u>	<u>ALTIMETER SETTING</u>
a. Biggs AFB, Texas	1900 GMT, 26 December 1960	30.22 in
b. Amon Carter AFB, Texas	2300 GMT, 26 December 1960	30.14 in
c. Memphis, Tennessee	0300 GMT, 27 December 1960	30.26 in
d. Tri City, Tennessee	0500 GMT, 27 December 1960	30.13 in

2. Cloud Ceilings-From the official surface weather observations below, it is apparent that an aircraft departing Memphis at approximately 0300 GMT enroute to Tri City via Knoxville, arriving Tri City at 0530 GMT, would encounter cloud ceilings enroute except in the immediate vicinity of the Tri City Airport. Available pilot reports, flash advisories, and temperature data indicate; (a) cloud tops would be predominately below 7,500 feet MSL, (b) moderate icing in clouds, (c) terrain ridges in the Tri City area obscured by clouds and/or fog.

<u>LOCATION</u>	<u>TIME (DATE 27 DEC 60)</u>	<u>CLOUD COVER, SURFACE VIS</u>
a. Memphis, Tennessee	0200 GMT	Clear, 15 miles
	0300 GMT	Clear, 15 miles
b. Nashville, Tennessee	0300 GMT	1500' Ovcst 8 miles
	0400 GMT	1500' Ovcst 10 miles
	0500 GMT	1500' Ovcst 10 miles
c. Knoxville, Tennessee	0400 GMT	3700' Brkn 15 miles
	0500 GMT	1900' Ovcst 15 miles
	0600 GMT	2000' Ovcst 15 miles
d. Tri City, Tennessee	0400 GMT	Est 4500' Brkn ceiling 4 miles w/fog
	0500 GMT	4500' Sctd 3 miles w/fog (vsby E 3/4 mile)
	0535 GMT	4500' Sctd 3 Miles w/fog (vsby E 3/4 mile)

I hereby certify that the preceding statement is true and accurate to the best of my knowledge and belief.

(b) (6)

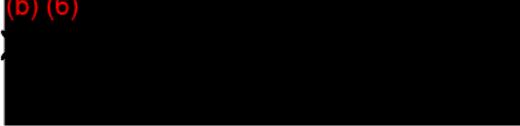


S T A T E M E N T

SUBJECT: Estimated ETA's, Associated Weather, and Forecast Weather at all Scheduled Stops (Army R41671, 26 December 1960, 1800 GMT, 1200 CST).

1. Departed Fort Bliss, Texas 26/1829 GMT (26/1229 CST).
2. ETA, Dallas Texas, 26/2300 GMT.
  - a. 2200-clear, 15 miles visibility, sfc wnd northeast 11 knots.
  - b. 2300-clear, 15 miles visibility, sfc wnd northeast 9 knots.
  - c. 0000-clear, 15 miles visibility, sfc wnd northeast 9 knots.
  - d. (Forecast Wx for ETA)-high scattered, 15 mi vsby, sfc wnd North-Northeast 10 gusts to 15 knots.
3. ETA, Memphis, Tennessee, 27/0600 GMT.
  - a. 0400-clear, 15 miles visibility, sfc wnd east-northeast 9 knots.
  - b. 0500-clear, 15 miles visibility, sfc wnd east-northeast 9 knots.
  - c. 0600-1,800 scattered, 15 mi vsby, sfc wnd east-northeast 6 knots.
  - d. (Forecast Wx for ETA)-3,000 broken ceiling, 10 mi vsby, sfc wnd west-nort west 12 knots.
4. ETA, Knoxville, Tennessee, 27/0730 GMT.
  - a. 0700-measured 2,000 ovct, 15 mi vsby, north-northeast 7 knots.
  - b. 0800-measured 2,000 ovct, 10 mi vsby, north-northeast 6 knots.
  - c. 0900-measured 2,000 ovct, 10 mi vsby, north at 10 knots.
  - d. 1000-measured 2,000 ovct, 10 mi vsby, north-northeast 10 knots.
  - e. Not a scheduled stop, forecast not required.
5. ETA, Tri City, Tennessee, 27/0800 GMT.
  - a. 0800-2,200 brkn variable to scattered, 10 mi vsby, north 10 knots.
  - b. 0900-measured 2,400 ovct, 12 mi vsby, north-northeast 5 knots.

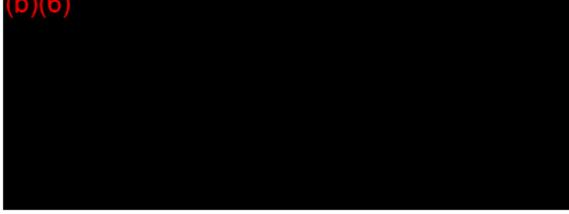
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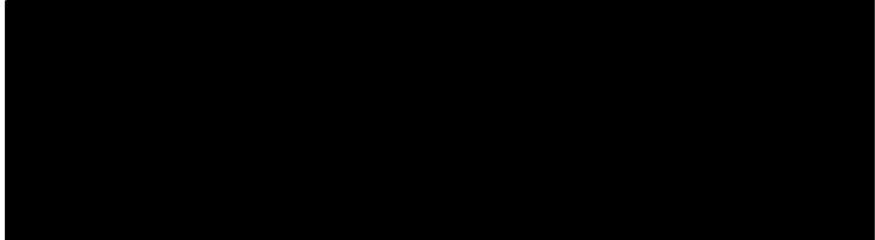
- c. 1000-measured 2,400 ovcst, 12 mi vsby, north-northeast 5 knots.
  - d. (Forecast Wx for ETA)-1,000 ovcst, 3 mi vsby in fog, sfc wnd west-northwest 10 knots.
6. ETA, Davison AAF, Md., 27/1400 GMT.
- a. 1400-high thin scattered, 15 mi vsby, northwest 13 knots.
  - b. 1500-high thin scattered, 7 mi vsby, north-northwest 13 gusts to 21 knots.
  - c. 1600-high thin scattered, 7 mi vsby, northwest 14 gusts 20 knots.
  - d. (Forecast Wx for ETA)-1,000 ovcst, layers to high brkn, 5 mi vsby in fog, sfc wnd from southwest at 12 knots.

I hereby certify that the preceding weather data was extracted from official weather files and decoded without alteration.

(b)(6)



(2)



## S T A T E M E N T

SUBJECT: Statement of Enroute Surface Weather Observations  
(Dallas, Texas to Tri City Tennessee)

1. 26/2300 GMT (26/1700 CST)

a. Dallas, Texas: Clear sky, surface visibility 15 miles, surface temperature  $59^{\circ}$  F, surface dewpoint  $33^{\circ}$  F, surface wind from the northeast at 9 knots, altimeter setting 30.14 inches.

b. Memphis, Tennessee: Clear sky, surface visibility 15 miles, surface temperature  $49^{\circ}$  F, surface dewpoint  $33^{\circ}$  F, surface wind from the north at 12 knots, altimeter setting 30.17 inches.

2. 27/0000 GMT (26/1800 CST)

a. Dallas, Texas: Clear sky, 15 miles visibility, surface temperature  $55^{\circ}$  F, surface dewpoint  $33^{\circ}$  F, surface wind from the northeast at 7 knots, altimeter setting 30.14 inches.

b. Memphis, Tennessee: Clear sky, surface visibility 15 miles, surface temperature  $46^{\circ}$  F, surface dewpoint  $31^{\circ}$  F, surface wind from the east-northeast at 6 knots, altimeter setting 30.18 inches.

3. 27/0100 GMT (26/1900 CST)

a. Dallas, Texas: Clear sky, surface visibility 15 miles, surface temperature  $51^{\circ}$  F, surface dewpoint  $33^{\circ}$  F, surface wind from the northeast at 7 knots, altimeter setting 30.14 inches.

b. Memphis, Tennessee: Clear sky, surface visibility 15 miles, surface temperature  $43^{\circ}$  F, surface dewpoint  $34^{\circ}$  F, surface wind from the northeast at 8 knots, altimeter setting 30.23 inches.

c. Knoxville, Tennessee: 4,000 scattered, 15 miles surface visibility, surface temperature  $50^{\circ}$  F, surface dewpoint  $46^{\circ}$  F, surface wind from the southwest at 3 knots, altimeter setting 30.11 inches.

d. Tri City, Tennessee: Measured 600 foot broken ceiling, 4,500 foot broken clouds, 1 1/2 miles surface visibility with fog, surface temperature  $37^{\circ}$  F, surface dewpoint  $36^{\circ}$  F, surface wind from the north-northeast at 5 knots, altimeter setting 30.09 inches.

4. 27/0200 GMT (26/2000 CST)

a. Memphis, Tennessee: Clear sky, surface visibility 15 miles, surface temperature  $40^{\circ}$  F, surface dewpoint temperature  $31^{\circ}$  F, surface wind from the northwest at 10 knots, altimeter setting 30.24 inches.

(b)(6) [REDACTED]

(Continues)

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b. Knoxville, Tennessee: Measured 2,800 foot broken ceiling, surface visibility 15 miles, surface temperature  $51^{\circ}$  F, surface dewpoint  $45^{\circ}$  F, surface wind from the west-northwest at 10 knots, altimeter setting 30.12 inches.

c. Tri City, Tennessee: Partial obscuration, measured 500 foot overcast, surface visibility  $3/4$  miles (variable from  $1/2$  to 1 mile) surface temperature  $36^{\circ}$  F, surface dewpoint  $36^{\circ}$  F, surface wind from the west-southwest at 4 knots, altimeter setting 30.10 inches.

5. 27/0300 GMT (26/2100 CST)

a. Memphis, Tennessee: Clear sky, surface visibility 15 miles, surface temperature  $38^{\circ}$  F, surface dewpoint  $30^{\circ}$  F, surface wind from the northeast at 10 knots, altimeter setting 30.26 inches.

b. Knoxville, Tennessee: Measured 3,000 broken ceiling, surface visibility 15 miles, surface temperature  $48^{\circ}$  F, surface dewpoint  $41^{\circ}$  F, surface wind from the north-northeast at 9 knots, altimeter setting 30.15 inches.

c. Tri City, Tennessee: Partial obscuration, measured 300 foot broken ceiling, surface visibility  $3/4$  mile in fog (visibility varying from  $1-1/2$  mile in fog), surface temperature  $38^{\circ}$  F, surface dewpoint  $37^{\circ}$  F, surface wind from the west-northwest at 4 knots, altimeter setting 30.12 inches.

6. Knoxville, Tennessee (Surface Data): 27/0400 GMT to 27/0600 GMT (26/2200 CST to 27/0000 CST)

a. 2200 CST: Measured 3,700 foot broken ceiling, visibility 15 miles, temperature  $44^{\circ}$  F, dewpoint  $38^{\circ}$  F, wind from the north-northeast at 9 knots, altimeter setting 30.16 inches.

b. 2300 CST: Measured 1,900 foot overcast, visibility 15 miles, temperature  $42^{\circ}$  F, dewpoint  $36^{\circ}$  F, wind from the north-northeast at 9 knots, altimeter setting 30.17 inches.

c. 27/0000 CST: Measured 2000 overcast, 15 miles visibility, temperature  $41^{\circ}$  F, dewpoint  $34^{\circ}$  F, wind from the north-northeast at 5 knots, altimeter setting 30.18 inches.

d. 0100 CST: Measured 2,000 overcast, 15 miles visibility, temperature  $40^{\circ}$  F, dewpoint  $33^{\circ}$  F, wind from the north-northeast at 7 knots, altimeter setting 30.21 inches.

(b)(6)

(Continues)

7. Tri City, Tennessee (Surface Data): 27/0300 GMT to 27/0900 GMT  
(26/2100 CST to 27/0300 CST)

- a. 2100 CST: Partial obscuration, measured 300 foot broken ceiling, 3/4 mile in fog (variable 1 to 1/2 mile), temperature 38° F, dewpoint 37° F, wind from the west-northwest at 4 knots, altimeter setting 30.12 inches.
- b. 2105 CST: Partial obscuration, 300 thin broken, visibility 3/4 mile (variable 1 to 1/2 mile) in fog, wind from the west-northwest at 4 knots.
- c. 2129 CST: Partial obscuration, estimated 4,500 broken ceiling, visibility 1/8 mile in fog, wind from the west-northwest at 6 knots, altimeter setting 30.12 inches.
- d. 2143 CST: Same as # c above.
- e. 2159 CST: Estimated 4,500 broken ceiling, visibility 4 miles in ground fog, temperature 38° F, dewpoint 38° F, wind from the northwest at 11 knots, altimeter setting 30.12 inches.
- f. 2240 CST: 4,500 scattered clouds, visibility 4 miles in ground fog.
- g. 2259 CST: 4,500 scattered clouds, visibility 3 miles in ground fog, temperature 39° F, dewpoint 37° F, wind from the southwest at 4 knots, altimeter setting 30.12 inches (visibility east 3/4 mile).
- h. 2335 CST: 4,500 scattered clouds, visibility 3 miles in ground fog, visibility east 3/4 mile.
- i. 2358 CST: 4,500 scattered clouds, visibility 7 miles, temperature 37° F, dewpoint 35° F, surface wind from the north-northwest at 7 knots, altimeter setting 30.13 inches.
- j. 0100 CST: 1,400 scattered clouds, visibility 7 miles, temperature 35° F, dewpoint 34° F, wind from the west-northwest at 3 knots, altimeter setting 30.15 inches.
- k. 0200 CST: Measured 2,200 foot broken ceiling, visibility 10 miles, temperature 36° F, dewpoint 32° F, winds from the north at 10 knots, altimeter setting 30.18 inches, ceiling is varying to scattered condition.

(Continues) **(b) (6)**

1. 0300 CST: Measured 2,400 overcast, 12 miles visibility, temperature  $35^{\circ}$  F, dewpoint  $32^{\circ}$  F, wind from the north-northeast at 5 knots, altimeter setting 30.19 inches.

I hereby certify that the preceding weather data was extracted from official weather files and decoded without alteration.

(b)(6)



(b)



## S T A T E M E N T

SUBJECT: Statement of terminal forecasts

### I. TAFORS, transmitted 26 December 1960, 1600 GMT (1000 CST).

a. Sewart AFB, Tennessee -- Start of forecast period, 26/1700 GMT (1100 CST); end of forecast period, 27/1700 GMT (1100 CST); forecast was based on 26/1200 GMT (0600 CST) Surface chart: 8/8 total sky cover, surface wind from 210 degrees at 10 with gusts to 20 knots, surface visibility  $7\frac{1}{2}$  miles, status of the sky was unchanged during the last hour, lowest layer of clouds 6/8 cover, type cloud stratocumulus with base at 1600 feet and top at 2,000 feet, height of freezing level 6100 feet, second layer of clouds 8/8 cover, stratocumulus, with base at 3200 feet and tops at 5,000 feet, gradual change from 26/2300 GMT (26/1700 CST) to 27/0100 GMT (26/1900 CST) to 6/8 total sky cover, surface wind from 340 degrees at 10 knots, surface visibility  $7\frac{1}{2}$  miles, clouds becoming less developed during the last hour, lowest layer of clouds stratocumulus, 6/8 sky cover with base at 2500 feet and top at 5,000 feet; gradual change from 27/0600 GMT (27/0000 CST) to 27/0800 GMT (27/0200 CST) to 8/8 total sky cover, surface wind from 360 degrees at 10 knots, surface visibility 3 miles with fog, lowest layer of clouds stratocumulus, 8/8 cover with base at 1,000 feet and top at 2,500 feet.

b. McGuire AFB, N.J. -- Start of forecast period, 26/1700 GMT (1100 CST); end of forecast period, 27/1700 GMT (1100 CST); forecast was based on 26/1200 GMT (0600 CST) surface chart: 0/8 total sky cover, surface wind from 230 degrees at 15 with gusts to 20 knots; remainder of this forecast was garbled.

c. Dover AFB, Del. -- Start of forecast period, 26/1700 GMT (1100 CST); end of forecast period 27/1700 GMT (27/1100 CST); forecast was based on 26/1200 GMT (26/0600 CST) surface chart: 0/8 total sky cover, surface wind from 230 degrees at 10 knots with gusts to 20 knots; change beginning at 27/0300 GMT (26/2100 CST), lasting two hours, to 7/8 total sky cover, surface wind from 240 degrees at 10 with gusts to 15 knots, surface visibility  $8\frac{1}{8}$  miles, clouds developing during the last hour, lowest cloud 3/8 cover, stratocumulus, with base at 4,000 feet and top at 7,000 feet, zero degree isotherm at 5,000 feet, second layer of clouds, altocumulus, 6/8 cover, with base at 9,000 feet and top at 14,000 feet, change beginning at 27/0900 GMT (27/0300 CST), lasting two hours, to 8/8 total sky cover, surface wind 310 degrees at 10 with gusts to 20 knots, surface visibility  $8\frac{1}{8}$  miles, clouds developing during the last hour, lowest cloud 6/8 cover, stratocumulus, with base at 3,000 feet and top at 7,000 feet, height of zero degree isotherm 4,000 feet, second layer of clouds 8/8 cover, altostratus, bases 8,000 feet, layered to 17,000 feet; change beginning 27/1300 GMT (27/0700 CST), lasting two hours, to 3/8 total sky cover, surface wind from 330 degrees at 15 with gusts to 25 knots, surface visibility 10 miles, clouds dissipating during the last hour, lowest cloud layer, 3/8 cover, stratocumulus, bases at 3,000 feet, tops 6,000 feet, zero degree isotherm at 14,000 feet.

(Continues) (b) (6)

d. Langley AFB, Va. -- Start of forecast period, 26/1700 GMT (1100 CST); end of forecast period 27/1700 GMT (1100 CST); forecast was based on 26/1200 GMT (26/0600 CST) surface chart: 0/8 total sky cover, surface wind from 240 degrees at 15 knots; gradual change from 26/2000 GMT (26/1400 CST) to 26/2200 GMT (26/1600 CST) to 5/8 total sky cover, surface wind from 240 degrees at 15 knots, surface visibility 10 miles, clouds forming during the last hour, lowest layer of clouds, stratocumulus, 3/8 cover with bases at 3,500 feet and tops at 5,000 feet, second layer of clouds, cirrus, 5/8 cover bases 25,000 feet and tops 40,000 feet; gradual change from 27/0200 GMT (26/2000 CST) to 27/0400 GMT (26/2200 CST) to 8/8 total sky cover, surface wind from 240 degrees at 15 knots, surface visibility 3 miles with slight intermittent rain, lowest cloud layer, stratocumulus, 5/8 cover, bases at 1,500 feet, tops at 8,000 feet, second layer of clouds, 5/8 cover, altocumulus, bases 8,000 feet, tops 13,000 feet; gradual change from 27/1100 GMT (27/0500 CST) to 27/1300 GMT (27/0700 CST) to 7/8 total sky cover, surface wind from 300 degrees at 15 knots, surface visibility 10 miles, clouds dissolving during the last hour, lowest layer of clouds, 3/8 cover, cumulus with bases at 4,000 feet and tops at 9,000 feet, height of zero degree isotherm 4,000 feet, second layer of clouds, 5/8 altocumulus, bases, 10,000feet, tops 12,000 feet.

II. TFAWS, transmitted over SAUS # 96, 26 December 1960, 1500 GMT (0900 CST).

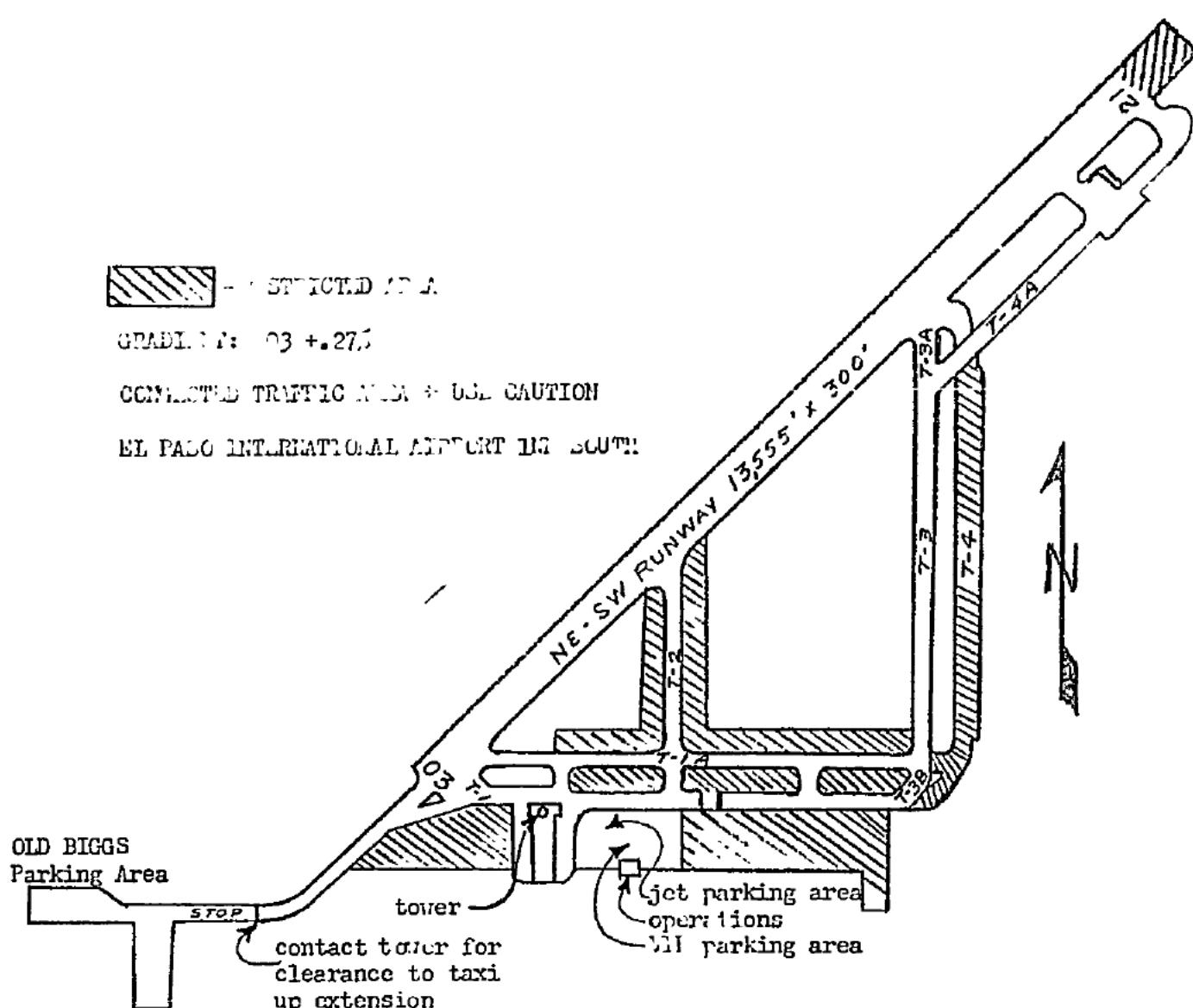
a. Andrews AFB, Md. -- Clear, 6 miles surface visibility in haze, surface temperature 36° F, surface dewpoint 32° F, surface wind from the southwest at 9 knots; forecast for 26/1800 GMT (26/1200 CST), scattered clouds above 10,000 feet, surface visibility 7 miles or more; forecast for 27/0300 GMT (26/2100 CST), 10,000 foot broken ceiling, with surface visibility 7 miles or greater.

b. Bolling Field, Washington D.C. -- Clear, 5 miles surface visibility in haze and smoke, surface temperature 34° F, surface dewpoint 29° F, surface winds calm, surface visibility northwest through north 4 miles; twelve hour forecast same as Andrews AFB in item # A above.

I hereby certify that the preceding weather data was extracted from official weather files and decoded without alteration.

(b) (6)





GRADE: 1% : 03 + .27%

CONNECTED TRAFFIC AREA + USE CAUTION

EL PASO INTERNATIONAL AIRPORT 1M SOUTH

TAXI SLOWLY + USE CAUTION

AIRPORT TRAFFIC CONTROL CLEARANCE

ATC Clears AF \_\_\_\_\_ to \_\_\_\_\_ via \_\_\_\_\_

Maintain \_\_\_\_\_ contact \_\_\_\_\_

FOR FURTHER CLEARANCE ON \_\_\_\_\_ (FREQ)

Departure Instructions \_\_\_\_\_

Channel (1) 236.6 Primary Tower  
 Channel (2) 200.0 Traffic Control  
 Channel (3) 121.9 Ground Control  
 Channel (15) 110.0 Approach Control  
 Channel (16) 270.6 Departure Control

HEADQUARTERS  
U. S. ARMY AIR DEFENSE CENTER  
Fort Bliss, Texas

FLIGHT ORDER  
NUMBER 495

DATE 26 DEC 60

The following named CR/M-WP on or about 26 DEC 60 in L20  
(date) (type)

aircraft number 54-1671 from BIF to DAA  
(aircraft)  
cipap, for purpose of C/R  
(purpose of flight) and upon completion of flight,  
will return to proper station on or about 30 Dec 60.  
(date)

<u>Grade</u>	<u>Name</u>	<u>Army Service Nr</u>	<u>Organization</u>	<u>Duty</u>
<u>1/Lt</u>	<u>Donald G. Bales</u>	<u>(b) (6)</u>	<u>USAADCEN</u>	<u>P</u>

FOR THE COMMANDER:

(b) (6)

(Title)

(b) (6)

A CERTIFIED TRUE COPY:

(b) (6)

(Title)

USE

# UNITED STATES OF AMERICA

UNITED STATES DEPARTMENT OF COMMERCE  
WEATHER BUREAU

Station WBAS, Bristol, Tennessee Date December 29, 1960

I hereby certify that the attached is an official true copy of a United States Weather Bureau record.

Meteorologist in Charge.

I hereby certify that each publication listed below is an official publication of the United States Weather Bureau.

OBSERVATIONS ON DEC. 26-27, 1960 AT TRI-CITY AIRPORT

RS 2154	-X M3@3/4 VF	213/38/37 -> 4/012 /F3	VSBY 1/2 V 1
S 2205	-X 3-@3/4 VF	-> 4	/F3 VSBY 1/2 V 1
S 2229	-X E45@1/8 F	-> 6/012 /FT	
L 2243	-X E45@1/8 F	/F6	
RS 2254	E45@4 GF	213/38/38 -> 11/012	
V 2340	45@4 GF		
R 2359	45@3 GF	213/39/37 -> 4/012 /VSBY E 3/4	
✓ 0035	45@3 GF		VSBY E 3/4
R 0058	45@7	217/37/35 -> 7/013	

TERMINAL FORECAST FOR TRI ISSUED BY MEM 261200-270000

80 C15@5 H 7/10 OCNLY C8@3 R-H

WINDS ALOFT FORECAST ISSUED BY MEM 262300-271100

TYS 3-0115/-4 5-3420/-5 10-2935/-4 15-2845/-13

(ALL TIMES EASTERN STANDARD)

1100E-1200L

(b) (6)

FL DCA 270355

FLASH ADVISORY NR 7. OVR MTN SXNS OF WVA MD AND VA OCNL MDT ICL  
SVR TURBC BLO 100. LGT TO MDT ICGIC. RDGS OBSCD. VALID TIL 0340E

TRI OP125 ZWH 282143Z

TO TRI

(b) (6) ACCIDENT INVEST. OFFICER OF R16171  
NAME OF CLEARANCE OFFICER THAT CLEARED ABOVE A/C  
WAS (b)(6) ORANG. 2048TH AACSPDN (b)(6)

Copy for

(b) (6)

TRI 06 ZXF 281657Z

ATTN (b) (6) ACCIDENT INVESTIGATING OFFICER FOR R 5416771 CRASH  
27 DEC 60.

FLIGHT PLAN RECEIVED FOR CARSWELL FLIGHT SERVICE FOLLOWS.

VFR R41671 L20 100 BIF DAL MEM TYS DAAM

ASMD1815 1900 NR 0600 UHF ALL BALES 33 RMKS 0100 FUEL SFOP AT DAL 0100

FUEL AT MEM 0100 FUEL STOP AT TRIM

CHANGE OF FLIGHT PLAN RECEIVED FROM CZRSWELL FS AT 262130Z FOLLOWS.

CHNG

R16171 BIF R DAA CANCELLED PAX STP AT DAL.

ACFT LANDED MEM 270150Z DEPARTED MEM 270244Z ACFT REFUELED MEM  
WITH 87.8 GALLONS BY MEM AREQ. ZXFT

TRI 3 ABI  
E REF R 541671. R1671 ABI 2108 115 VFR NOT STOPPING DAL STOPPING  
ACF ABI UPPER WINDS GIVEN 262108

ABI

*ARMY*

Dec 28 2004

TRI 3 NWL  
RE YR ALCKT MSG. R1671 OVR NWL 262148Z VFR 115 DSTN DCA. ~~FMNFOE, TFK CT~~ ACF  
NWL

TRI OP53 PTW  
STN. R41671 ARRIVED AND DEPARTED ACF BTW 2200-2300Z DEC 26 CMA  
NO FP INFO THIS FACIL. ACFT REFUELED BY ALLIED FUELING SVC  
117 GALS.

DAVIS ACP TWR 311538

TRI 4 DAL  
R1671 CTC 26 2317 OVR DAL 2315 0500 ENRTE DCA GAVE WINDS ALOFT

DAL

(b) (6)

Dec 28 [REDACTED] 2004

AIRPORT ALCKT,  
3RISTOL, TE

TRI 3 PBF  
RE R1671 OVR PBF 270102 115 RECEIVED LIT AW

PBF

TRI 28 NEM  
STN. RE R1671. RDO CTC DEC 270244 DEPT NEM VFR DCA CLBG 115. ADZ  
IF DCMTN RQRD  
NEM

TRI OP19 BWA  
STN. RE R1671. RADIO CONTACT WITH R1671 DECEMBER 270407  
REPORTED OVR BWA 0403 115 MSL VFR DCA. REQD AND WAS GIVEN  
CURRENT WX AT TYS AND DCA. DCA FL 7 ALSO DELIVERED TO R1671.  
ADVISE IF YOU DESIRE DOCUMENTATION FROM THIS FACILITY.

(b) (6)

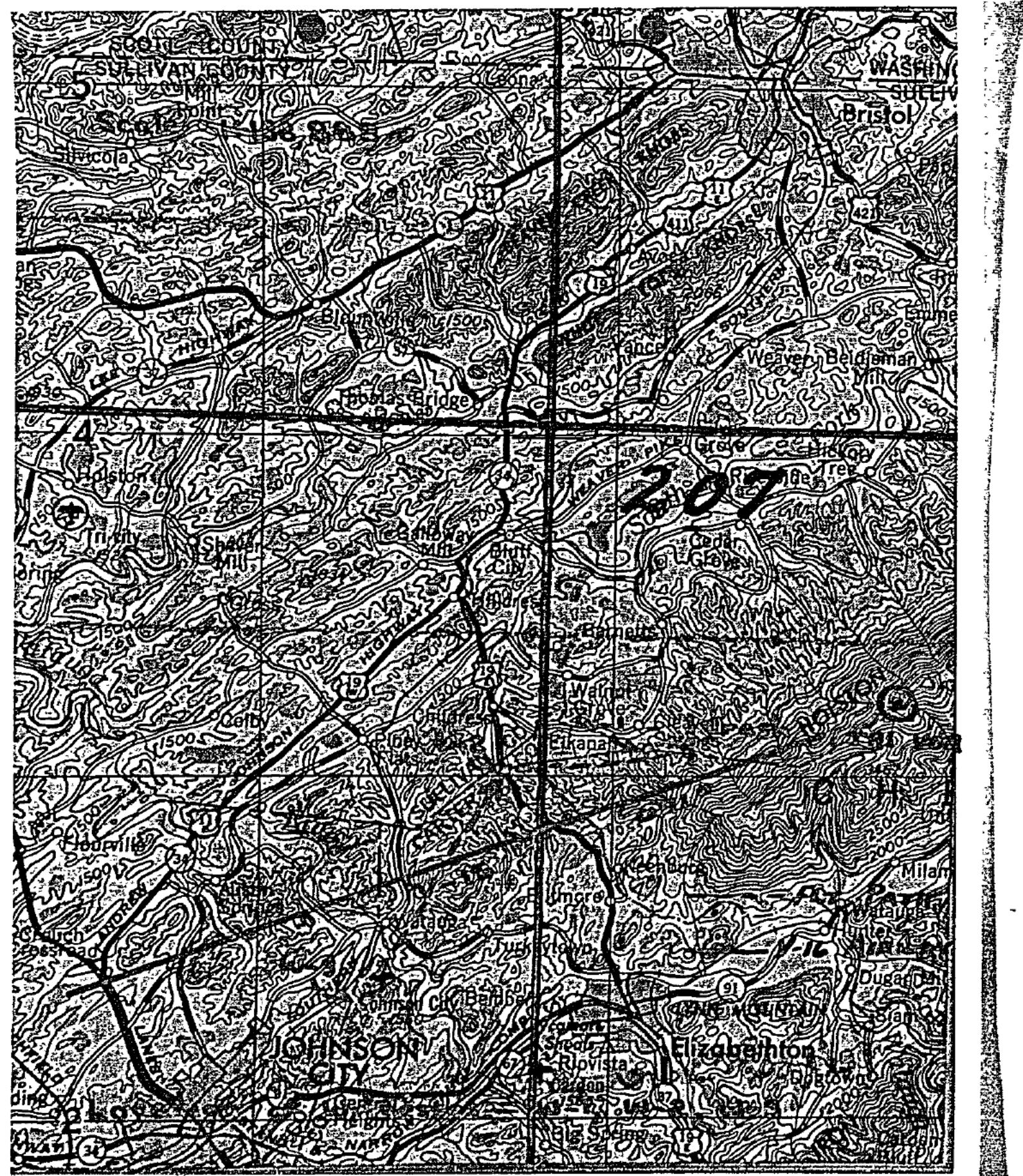
COPY  
ARMY

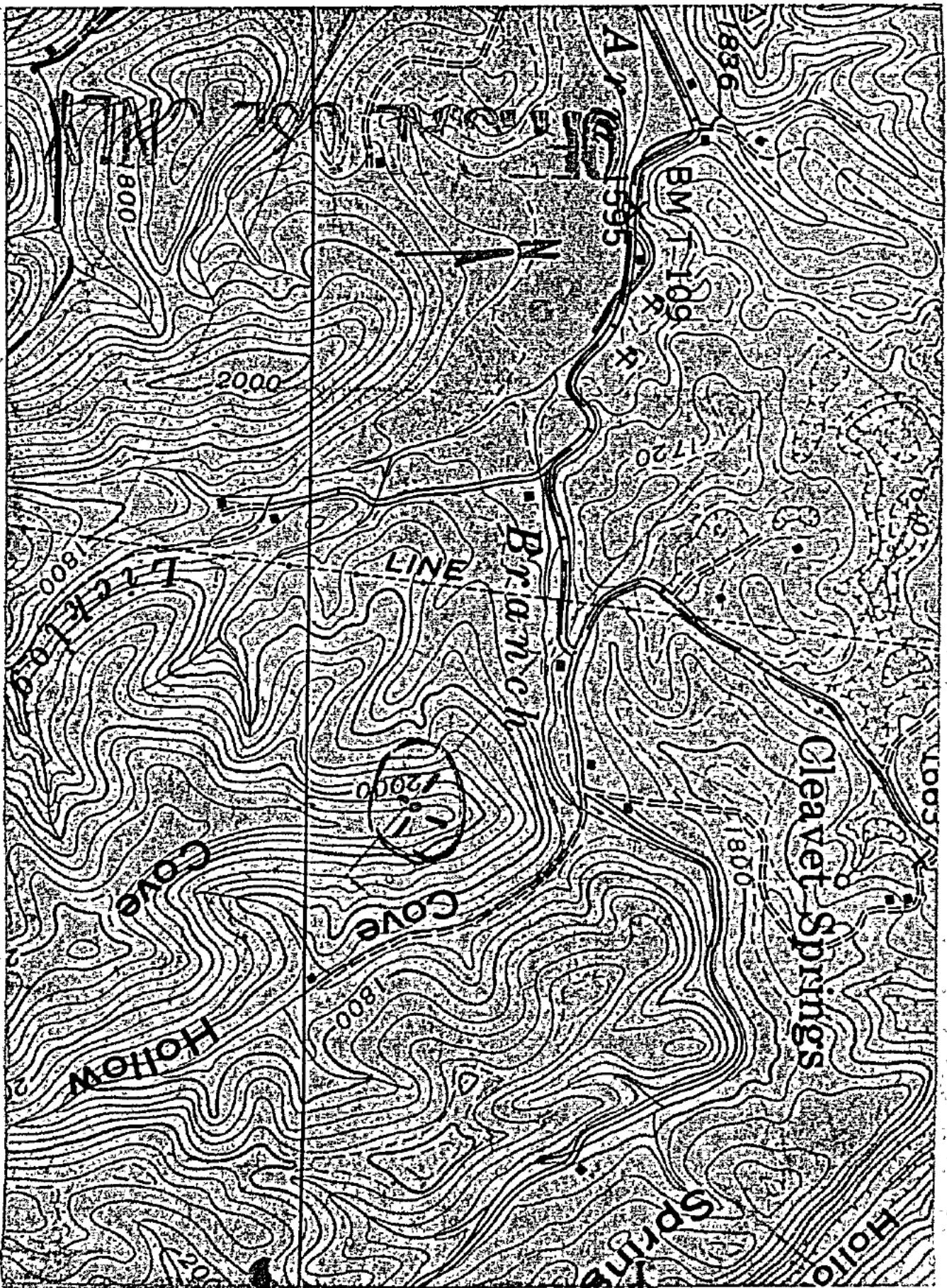
TRI 2 TYS  
RE R1671. GAVE TRI WEATHER AT 0441Z. ACFT REPORTED OVR TYS  
AT 0500Z ALTITUDE 11500 ENROUTE DCA.

TYS

182-200-183-8 HUMBLE					
DEPT OF THE ARMY OFFICE QUARTERMASTER OF THE FORT BLISS TEXAS					
PURCHASED FROM	PURCHASER'S SIGNATURE				
ALLIED AVIATION	<i>M. B. Schleser</i>				
FORT WORTH 12-21-60 41671					
PRODUCT	QUANTITY	FED. TAX	AMOUNT	TEXAS TAX EXEMPTION CERT. NO.	MANNER OF DELV.
HUMBLE AVIATION GASOLINE GR. 80/87	117	48	49 14		TRUCK
HUMBLE AVIATION GASOLINE GR. 91/98					
HUMBLE AVIATION GASOLINE GR. 100/120					
HUMBLE AVIATION ENGINE OIL GR.	170	160	160		
ORDN NO.	TOTAL	\$ 30 74		MANIFEST NO.	
				HUMBLE 282118	

52-025-0351-1 (TEXACO)					
DEPT OF THE ARMY OFFICE OF THE - QUARTERMASTER OF FORT BLISS, TEX.					
TEKACO AERO MARINES TEXAS 12-26-60	PURCHASER'S SIGNATURE <i>M. B. Schleser</i>				
THANK YOU					
MERCHANDISE OR SERVICE	QUAN.	STATE TAX	FED TAX	TOTAL PRICE	AMOUNT
TEKACO AVIATION GASOLINE - GRADE	150 97.8			33 30	
TEKACO MARINE MOTOR OIL - GRADE					
TEKACO AIRCRAFT ENGINE OIL - GRADE					
NO TAX					
AM 1024383					
TOTAL CHARGE \$ 33 30					
ORIGINAL INVOICE 					
PRICES AND AMOUNT INCLUDES ALL APPLICABLE FEDERAL, STATE AND LOCAL TAXES AS SHOWN.					
TERMS PAYABLE WITHOUT DISCOUNT UPON RECEIPT OF MONTHLY STATEMENT OF PURCHASES.					
AIRCRAFT LICENSE NO. 111 C71					
MARINE VESSEL NO. 1 20					
TAX EXEMPTION CERTIFICATE NO.					
CERTIFICATE OF INTENTION (TO BE SIGNED BY DEALER OR STATES AGENT) THE UNDERSIGNED HEREBY CERTIFIES THAT THE PURCHASE OF THE ABOVE PRODUCTS PROVIDED HEREIN WILL NOT BE USED FOR COMMERCIAL PURPOSES BUT AT 3% RATE OF TAXES AS PROVIDED BY LAW, CHARTER FEES AS HIS INTENTION TO USE SUCH PRODUCTS FOR A NON-TAXABLE PURPOSE AND TO MAKE CLAIM FOR A REFUND OF THE TAX THERE ON. SIGNED:					





(b) (5)

(b) (5)



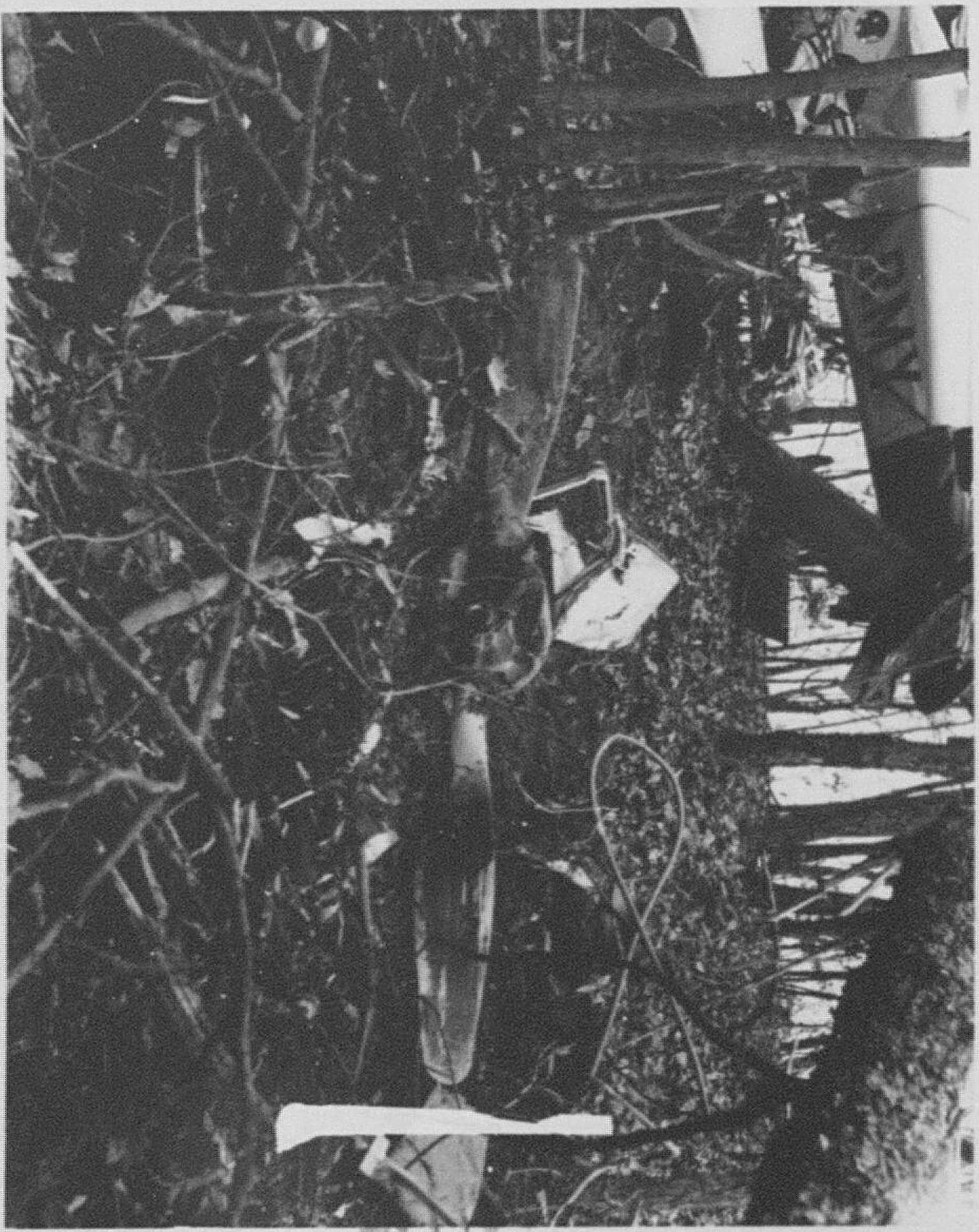
VOR



USE ONLY

TERRAIN SHOWING OMNI, CRASH SITE AND DIRECTION OF FLIGHT

WRECKAGE DISTRIBUTION



(b)(6)



PATH OF FLIGHT AND WRECKAGE DISTRIBUTION

A black and white photograph showing a close-up view of a control panel, likely from a military aircraft. The panel features several circular controls, switches, and a prominent dial. A small rectangular label is attached to the top left of the panel, containing the following text:

DO NOT USE AN/ARA-5  
ABOVE 49 MCS

FREQ  
CAP

ONLY

ARC-55 CONTROL CONSOLE AND TRIM CONTROL



ENGINE, INSTRUMENT PANEL, CONTROL COLUMN AND CABIN WRECKAGE

HEADQUARTERS FOURTH UNITED STATES ARMY  
Fort Sam Houston, Texas

31 January 1961

CIRCULAR  
NUMBER 95-1

AVIATION

Cross-Country Proficiency Flight Training

1. REFERENCES:
- Par 9c, Fourth U. S. Army Command and station Operating Program.
  - AR 95-1.
  - DA Cir 95-1, 25 May 60.
  - Annex D to Fourth U. S. Army Training Directive.

2. PURPOSE. To establish procedures for the scheduling and accomplishment of cross-country proficiency training flights in Army aircraft.

3. GENERAL. Extended cross-country flights are considered an essential part of Army Aviator training. To insure that the maximum training benefit is achieved from each such flight, and that flights are conducted under the safest practicable conditions, the procedures outlined in par 4, below, will apply to all cross-country training flights originating in the Fourth U. S. Army Area.

4. IMPLEMENTATION. Unit commanders authorizing cross-country proficiency flights in Army Aircraft under their control will insure compliance with the following procedures prior to departure:

- In multi-passenger aircraft, a co-pilot will be provided.
- Flight scheduling will be in consonance with the intent of DA Cir 95-1, 25 May 60. Maximum flight time will not exceed eight hours first pilot time in any twenty-four hour period. Further restrictions may be imposed dependent upon the number of hours flown during the preceding twenty-four hour period, weather conditions, amount of night flying required, and enroute and terminal traffic conditions.
- Normally, subject training will be conducted within the geographic limits of the Fourth U. S. Army Area. If the flight is to cover more than 600 nautical miles from point of origin, at least one crew member will possess a current Army instrument card.
- Thorough pre-flight planning will be accomplished. This action will include, but not be limited to:
  - A careful study of the route to be flown to include terrain, navigational aids and alternate facilities.

Cir 95-1

(2) Study of current weather reports and forecasts.

(3) Fuel requirements.

(4) Inclusion of sufficient crew rest stops.

e. In addition to the foregoing, commanders will carefully consider the experience level of the aviators concerned to insure that the requirements of the flight contemplated are within their capabilities.  
(AKAAS-Eff until 31 Jan 62)

FOR THE COMMANDER:



(b)(6)

G. R. MATHER  
Major General, GS  
Chief of Staff

DISTRIBUTION:

Action: B(less 3,5,7), D(1,2,3,4,6), E(1,2,3,4,6)

Information: A(1,2,5,7,27), 10 cy A(3 (GI Safety)), C(1), M(5),

N(2), 6 cy N(5), Q(1)

1-Bell Acft Corp., Ft Worth, Texas