

APPENDIX

In the United States District Court for the Eastern District
of Pennsylvania

Civil Action No. 9793

Phyllis Brauner and Elizabeth Palya

v.

The United States of America

Docket Entries subsequent to original record

May 29, 1951	Record transmitted to U.S. Court of Appeals.
November 8, 1951	Letter of U.S. Attorney together with letter of Dept. of the Air Force filed. (C.A.# 9793)
January 15, 1952	Mandate of U.S. Court of Appeals affirming judgment of this Court filed.
March 27, 1953	Notice of taking depositions of Capt. Herbert W. Moore, et al. filed.
April 13, 1953	Certified copy of Order of U.S. Court of Appeals recalling mandate, filed. (4-14-53 Mandate returned to U.S. Court of Appeals.)
April 13, 1953	Mandate of U.S. Supreme Court reversing judgment of U.S. Court of Appeals and remanding case to U.S. District Court for further proceedings, filed (#9793)
June 22, 1953	Stipulation of Counsel for compromise settlement and Order of Court approving same, filed. (see #9793) 6/23/53 Noted.
August 5, 1953	Order to Dismiss Filed
August 5, 1953	In accordance with Order filed, this action is marked dismissed with prejudice.

Attest: J.A. Comey Dep. Clerk

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA**

PHYLLIS BRAUNER and :
ELIZABETH PALYA :

v. : Civil Action No. 9793

UNITED STATES OF AMERICA :

PATRICIA J. REYNOLDS :

v. : Civil Action No. 10142

UNITED STATES OF AMERICA :

STIPULATION

It is hereby stipulated and agreed between Phyllis Brauner and Elizabeth Palya, now remarried and known as Elizabeth Sacker, and Patricia J. Reynolds, now remarried and known as Patricia J. Herring, plaintiffs, by and through their undersigned attorney of record, and the United States of America, acting by and through its United States Attorney for the Eastern District of Pennsylvania:

I

The statutory basis for this agreement is Section 413 of the Federal Tort Claims Act (28 U.S.C. 2677, 1948 Ed.) as amended, to the effect that with the view to doing substantial justice the Attorney General is authorized to arbitrate, compromise, or settle any claim cognizable under the Federal Tort Claims Act, and the Attorney General of the United States has approved the compromise settlement herein agreed upon for the total amount of One Hundred

Seventy Thousand Dollars (\$170,000), without interest or costs.

II

The defendant, the United States of America, will pay to the plaintiff, Phyllis Brauner, the sum of Forty-Nine Thousand Eight Hundred Fifty-Five Dollars and fifty-five cents (\$49,855.55), without interest, which said sum of money will be accepted by the plaintiff, Phyllis Brauner, in full settlement and discharge of any and all of her several claims, demands, or causes of action on behalf of herself individually, and her heirs, executors, administrators, or assigns, against the defendant, the United States of America, for damages on account of the death of her husband, William Brauner, growing out of the accident referred to in the above-entitled cause, said accident being the one which occurred on October 6, 1948 when an airplane (type B-29) in the service of the United States Air Force, which was the property of the United States Air Force, while being operated by one Ralph W. Erwin, an agent of the United States Air Force, acting within the scope of his employment, crashed near Waycross, Georgia, and plaintiff's said husband, Willim Brauner, who was a passenger on said airplane, was killed.

III

The defendant, the United States of America, will pay to the plaintiff, Elizabeth Palya, now remarried and known as Elizabeth Sacker, the sum of Forty-Eight Thousand Three Hundred Fifty-Five Dollars and fifty-five cents (\$48,355.55), without interest, which said sum of money will be accepted by the plaintiff, Elizabeth Sacker, in full settlement and discharge of any and all of her several claims, demands, or causes of action on behalf of herself individually, and her heirs, executors, administrators, or assigns, against the defendant, the United States of America for damages on account of the death of her former husband, Albert Palya, growing out of the accident

referred to in the above-entitled cause, said accident being the same as that more fully described in paragraph II hereof.

IV

The defendant, the United States of America, will pay to the plaintiff, Patricia J. Reynolds, now remarried and known as Patricia J. Herring, the sum of Thirty-Nine Thousand Two Hundred Eighty-Eight Dollars and ninety cents (\$39,288.90), without interest, which said sum of money will be accepted by the plaintiff, Patricia J. Herring, in full settlement and discharge of any and all of her several claims, demands, or causes of action on behalf of herself individually, and her heirs, executors, administrators, or assigns, against the defendant, the United States of America for damages on account of the death of her former husband, Robert E. Reynolds, growing out of the accident referred to in the above-entitled cause, said accident being the same as that more fully described in paragraph II hereof.

V

The plaintiff, Phyllis Brauner, will execute and deliver to the defendant, the United States of America, a full and final release of her claim against the United States of America for the aforesaid damages, upon payment to her and to the Maryland Casualty Company jointly by the defendant of the said sum of Forty-Nine Thousand Eight Hundred Fifty-Five Dollars and fifty-five cents (\$49,855.55), without interest, and thereupon the said plaintiff will dismiss this action with prejudice and without costs, and will agree that no further suit will be instituted for the same cause of action.

VI

The plaintiff, Elizabeth Palya, now known as Elizabeth Sacker, will execute and deliver to the defendant, the United States of America, a full and final release of her claim against the United States of America for the aforesaid damages, upon payment to her by the defendant of the said

sum of Forty-Eight Thousand Three Hundred Fifty-Five Dollars and fifty-five cents (\$48,355.55), without interest, and thereupon the said plaintiff will dismiss this action with prejudice and without costs, and will agree that no further suit will be instituted for the same cause of action.

VII

The plaintiff, Patricia J. Reynolds, now known as Patricia J. Herring, will execute and deliver to the defendant, the United States of America, a full and final release of her claim against the United States of America for the aforesaid damages, upon payment to her by the defendant of the said sum of Thirty-Nine Thousand Two Hundred Eighty-Eight Dollars and ninety cents (\$39,288.90), without interest, and thereupon the said plaintiff will dismiss this action with prejudice and without costs, and will agree that no further suit will be instituted for the same cause of action.

VIII

The Franklin Institute, and its insurer, The Maryland Casualty Company, will execute and deliver to the defendant, the United States of America, a full and final release of their claims against the United States of America, to which they have been or may have been subrogated for compensation benefits paid to the said Phyllis Brauner, upon payment to the said Phyllis Brauner and to The Maryland Casualty Company jointly by the defendant of the sum of Forty-Nine Thousand Eight Hundred Fifty-Five Dollars and fifty-five cents (\$49,855.55), without interest, and thereupon they will all agree that no further suit will be instituted for the same cause of action, or any cause of action arising out of the accident set forth in this cause of action.

IX

The Radio Corporation of America (self-insured) will execute and deliver to the defendant, the United States of

America, full and final releases of its claims against the United States of America to which it has been or may have been subrogated for compensation benefits paid to the said Elizabeth Palya, now known as Elizabeth Sacker, and for compensation benefits paid to the said Patricia J. Reynolds, now known as Patricia J. Herring, upon the payment to the said Elizabeth Sacker by the defendant of the sum of Forty-Eight Thousand Three Hundred Fifty-Five Dollars and fifty-five cents (\$48,355.55), without interest, and upon the payment to the said Patricia J. Herring of the sum of Thirty-Nine Thousand Two Hundred Eighty-Eight Dollars and ninety cents (\$39,288.90), without interest, and thereupon the Radio Corporation of America will agree that no further suit will be instituted for the same causes of action, or any cause of action arising out of the accident set forth in these causes of action.

X

This settlement agreement is made subject to the approval of the Court in which these actions are pending.

XI

It is understood and agreed that the Court will allow counsel fees out of the proceeds of the award in the amount of \$32,500, being 20% of the amount stated less \$1500, to Charles J. Biddle, 117 South 17th Street, Philadelphia 3, Pennsylvania, attorney of record for the plaintiffs, the total award to be distributed as follows:

Phyllis Brauner and The Maryland Casualty Company	\$ 49,855.55
Elizabeth Sacker	48,355.55
Patricia J. Herring	39,288.90
Charles J. Biddle	32,500.00
	<u>\$170,000.00</u>

/s/ Charles J. Biddle

Attorney for Plaintiffs

United States Attorney

By: /s/ Joseph G. Hildenberger

By: /s/ William C. Thompson

Assistant U.S. Attorney
Attorneys for Defendant

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA**

PHYLLIS BRAUNER and
ELIZABETH PALYA

:

v.

: Civil Action No. 9793

UNITED STATES OF AMERICA

:

PATRICIA J. REYNOLDS

:

v.

: Civil Action No. 10142

UNITED STATES OF AMERICA

:

ORDER

The stipulation of compromise heretofore filed is approved in the total amount of One Hundred Seventy Thousand Dollars (\$170,000) without interest or costs, and it is

ORDERED that the action be dismissed with prejudice and without costs upon payment to the plaintiffs by the defendant of the amounts set forth in the stipulation; and it is further

ORDERED that counsel fees in the amount of \$32,500, being 20% of the total amount stated less \$1500, be paid to Charles J. Biddle, 117 South 17th Street, Philadelphia 3, Pennsylvania, attorney of record for the plaintiffs, such counsel fees to be paid out of and not in addition to the total amount stated in the stipulation.

BY THE COURT,

/s/ Kirkpatrick

United States District Judge

Filed June 22, 1953

[p.1]*

**REPORT OF SPECIAL INVESTIGATION OF
AIRCRAFT ACCIDENT INVOLVING
TB-29-100XX NO. 45-21866**

1. DATE AND TIME OF ACCIDENT: 6 October 1948, approximately 1408 EST
2. LOCATION OF ACCIDENT: Approximately 2 miles south of Waycross, Georgia
3. AIRCRAFT TYPE, MODEL, SERIES AND SERIAL NUMBER: TB-29-100XX No. 45-21866
4. AIRCRAFT HOME STATION AND ORGANIZATION:
3150th Electronics Squadron
Robins Air Force Base
Robins Field, Ca, AMC
5. RESULTS TO AIRCRAFT: Demolished
6. HISTORY OF AIRCRAFT AND ENGINES:
Aircraft: Date of Manufacture - 19 September
19XX
Total Hours - 305:00
Date of last overhaul - New

[* The following stamps and marginalia are found on page 1 of the original document:]

CLASSIFICATION CANCELLED OR CHANGED

TO RESTRICTED

BY AUTHORITY OF AFR 205 -1

BY RTM DATE 14 SEP. 50

CLASSIFICATION CANCELLED OR CHANGED

TO SECRET

BY AUTHORITY OF CS/USAF

BY [illegible] DATE 3 JAN. 49

ENGINES	1	2	3	4
Model	R-3350-57	R-3350-57	R-3350-57A	R-3350-57A
Number	M-460686	D-310027	D-310035	D-310313
Total hours	112:35	224:45	116:40	255:20
Hours since last major overhaul	112:35	New	New	15:20
Overhauling depot	OCAMA	Not appl.	Not appl.	OCAMA
Propeller model	Curtis K1.	Curtis K1.	Curtis K1.	Curtis K1.
Hours since last major overhaul	113:35	New	New	15:20

The aircraft was accepted with a total of 70 hours at Wright AFB on 25 June 1947. Records of the aircraft's history prior to this time were not available for study by the accident investigators.

7. PILOT, HOME STATION AND ORGANIZATION:

Ralph W. Irwin, AO-666261

Captain, USAF

1st Experimental Air Service Squadron

1st Experimental Guided Missile Group

Proving Ground Command

Eglin AFB, Eglin Field, Florida

8. PILOT HISTORY:

<u>Flying Time</u>	<u>1st Pilot or Solo Student</u>	<u>Other Pilot or Other Student</u>
Total hours	2507:00	616:00
Hours this type	2149:00	505:00
Hours this model [p.2]*	931:00	359:00

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<u>Flying Time</u>	<u>1st Pilot or Solo Student</u>	<u>Other Pilot or Other Student</u>
Hours last 90 days	51:00	45:00
Hours last 30 days	13:00	8:00
Hours last 24 hours	1:00	0:00
Actual combat hours	327:00	109:00

Instrument rating: White, 30 March 1948, Eglin AFB, Florida

9. COPILOT, HOME STATION AND ORGANIZATION:

Herbert W. Moore, Jr.,
AO-48322
Captain, USAF
3150th Electronics Squadron
Robins Air Force Base
Robins Field, Ga., AMC

10. COPILOT HISTORY:

<u>Flying Time</u>	<u>1st Pilot or Sole Student</u>	<u>Other Pilot Other Student</u>
Total hours	2210:00	743:00
Hours this type	1524:00	261:00
Hours this model	0:00	71:00
Hours last 90 days	0:00	20:00
Hours last 30 days	0:00	8:00
Hours last 24 hours	0:00	1:00

Actual combat hours: 340:00

11. OTHER CREW MEMBERS, HOME STATION, ORGANIZATION AND HISTORY: See par. 12.

12. RESULTS TO CREW AND PASSENGERS:

Pilot – Capt. Ralph R. Irwin, AO-666261, Fatal

Copilot – Capt. Herbert W. Moore, Jr., AO-48322, No injury

Engineer – T/Sgt. Earl W. Murrhee, AF-1417471, 3150th Electronics Squadron, Robins Air Force Base, Robins Field, Ga., No injury

12. RESULTS TO CREW AND PASSENGERS: (Contd)

Radio operator – T/Sgt. Melvin T. Walker, AF-6921342, 3150th Electronics Squadron, Robins Air Force Base, Robins Field, Ga., Fatal

Left scanner – T/Sgt. Walter J. Peny, AF-6900255, 3150th Electronics Squadron, Robins Air Force Base, Robins Field, Ga. Minor injury

Right scanner – M/Sgt. Jack G. York, AF-6968181, 3150th Electronics Sq., Robins Air Force Base, Robins Field, Ga., Fatal

[p.3]*

AP – T/Sgt. Dervin T. Irvin, AF-6953492, 3150th Electronics Squadron, Robins Air Force Base, Robins Field, Ga., Fatal
Navigator - 1st Lt., Lawrence W. Pence, Jr., AO-762068, 1st Exp. Air Service Sq. 1st Exp. Guided Missile Group, PGC, Eglin Air Force Base, Eglin Field, Florida, Fatal

Passenger – A. Palya, Civilian, RCA, Camden, N.J. – Fatal

Passenger – R. E. Cox, Civilian, Wright-Patterson Air Force Base – Fatal

Passenger – Robert Reynolds, Civilian, RCA, Camden, N.J. – Fatal

Passenger – E. A. Nechler, Civilian, Franklin Institute of Technology, Philadelphia, Pa. – Minor injury

Passenger – W. H. Brauner, Civilian, Franklin Institute of Technology, Philadelphia, Pa. – Fatal

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BY RTM DATE 14 SEP. 50

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13. NARRATION OF EVENTS:

On 6 October 1948 B-29 No. 45-21566, piloted by Capt. Ralph W. Irwin, AO-666261, took off from Robins AFB, on a research and development mission. The flight was to be a 5-hour mission for the purpose of completing an electronics project assigned to the organization. The landing list included the crew of 8 and 5 civilian technical representatives affiliated with the project. Three of the civilians were employed by the Radio Corporation of America and two by the Franklin Institute of Technology. The normal preflight and before takeoff checks were made by the crew and the takeoff and climb to 18,500 feet was without incident. Upon reaching approximately 18,500 feet the manifold pressure on No. 1 engine dropped to about 20 inches. An attempt to bring it back by the use of the manual emergency system and by replacing the turbo amplifier was ineffective so the engine was feathered. The crew was advised by the pilot to put on their parachutes and a descent and depressurization were started. During the process of feathering No. 1 a fire broke out that engulfed the aft half of the engine and the flames extended past the left scanner's window. Attempts to extinguish the fire by use of the engine fire extinguishers were to no avail. The manifold pressure on engine No. 2 then dropped to approximately 20 inches and about this time the main landing gear switch was activated and then the bomb bay doors were opened. Coincidental with the opening of the bomb bay doors the aircraft went into a spin to the left. The aircraft entered the spin violently and the centrifugal forces developed made movements by the personnel difficult. Two occupants in the

13. NARRATION OF EVENTS: (Contd)

forward compartment and two in the waist were able [p.4]* to abandon the aircraft and successfully opened their parachutes. The remaining six in the waist and three in the forward compartment were later found in or near the wreckage which was located approximately 2 miles south of Waycross, Georgia.

14. FACTS:

- a. The flight was an authorized research and development mission and all civilian passengers were authorized to participate in aerial flights under the provision of paragraph 1A(6) AR 95-90 dated 26 April 1947.
- b. Three of the five civilians on the landing list had previously flown in B-29's assigned to this squadron. (Exhibits I-1, I-2, I-3)
 - (1) A. Palya
 - (2) Richard B. Cox
 - (3) Robert B. Reynolds
- c. Two of the civilians that were included on the landing list had never previously flown with the organization and there was no record of previous B-29 flying time. (Exhibit I-4, I-5)
 - (1) Will Brauner
 - (2) Eugene A. Meckler

[* The following stamps and marginalia are found on page 4 of the original document:]

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BY RTM DATE 14 SEP. 50

0000760-55

14. FACTS: (Contd)

- d. The crew members had not previously flown together as a crew prior to the date of the accident. (Exhibit B-1, 06, B-2 Q37).
- e. Weather was not a factor in this accident in that all sequences for the area were above VFR minimum. (Exhibit G).
- f. The B-29 had approximately 15 hours flying time since the last 100 hours inspection. The aircraft was last flown six days prior to the date of the accident. No write ups reported by the pilot on Form I-A were considered applicable to the subject accident. (Exhibit H).
- g. Technical Orders 01-20EJ-177 and 01-20EJ-178, dated 1 May 1947, were not complied with. These Technical Orders provide for changes in the exhaust manifold assemblies for the purpose of eliminating a definite fire hazard. (Exhibit G-13).
- h. Form F, Weight and Balance Clearance, was filed with Operations Section and the aircraft was loaded within the permissible 00 limits. (Exhibit F).

[p.5]*

- i. Take-off and climb to altitude was accomplished without incident and all engine instrument readings were normal until an altitude of between 15,000 and 20,000 feet was attained when the manifold pressure on No.1 engine dropped to 20 inches. (Exhibit B-2 Q47).

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BY RTM DATE 14 SEP. 50

0000760-56

14. FACTS: (Contd)

- j. The engineer attempted to restore the manifold pressure by utilizing the manual amplifier system. This proved unsuccessful and a new amplifier was installed. Then this failed to rectify the situation, the engine was feathered on the direction of the pilot. (Exhibit B-2 Q47).
- k. Before the No. 1 engine was in a full feathered position, the left scanner and engineer observed a discoloration of the access doors to the engine accessory section. Fire broke out immediately according to the engineer's and scanner's statements. (Exhibit B-3 Q94).
- l. The fire extinguishers were utilized in an attempt to extinguish the fire; however, according to the engineer's statement it helped only momentarily. Fire was next observed to engulf the entire engine and the wing area immediately to the rear of No. 1 engine. (Exhibits B-2 Q45, B-3 Q94).
- m. The pilot, when feathering No. 1 engine, inadvertently hit the feather switch on No. 4 engine; however, according to the testimony the copilot immediately pressed the switch to unfeather No. 4 engine. (Exhibit B-1 Q10).
- n. The copilot lowered the gear by the normal method after the engineer's attempt to lower the nose gear failed. (Exhibit B-1 Q11).
- o. Bomb bay doors were opened by the pilot and according to the engineer and copilot the aircraft went into a spin to the left immediately after the doors were opened. (Exhibits B-1 Q11, B-2 Q48).
- p. Several witnesses on the ground reported hearing a definite explosion when the B-29 was at what they estimated to be 15,000 feet and they further reported that the left wing came off at that time. (Exhibits C, 4, 5, 6, 7, 8, 9, 10 and 11).

14. FACTS: (Contd)

- q. Examination of the wreckage revealed that No. 2, 3 and 4 engines showed no evidence of fire. The No. 1 engine showed evidence of fire around the right collector ring and supercharger and considerable melted and burned metal was found throughout the area from the accessory section to the supercharger. The No. 1 propeller was in the full feathered position. The No. 4 propeller blades were also found in the full feathered position. (Exhibit J).

[p.6]*

- r. The crew was alerted to prepare to abandon the aircraft and the pilot started to descend and depressurize the aircraft. (Exhibit B.3 Q94).
- s. Movement of personnel in the aircraft was greatly restricted by the centrifugal force imparted by the spin and only the left scanner, Sgt. Peny and a civilian technician, Mr. Meckler, were able to successfully abandon the aircraft from the rear compartment through the bomb bay. The copilot, Capt. Moore, and flight engineer, Sgt. Murrhee, were the only persons that successfully parachuted from the forward compartment through the nose wheel escape hatch.
- t. The bodies of T/Sgt. Melvin, T. Walker and Lt. Lawrence N. Pence, Jr. were found free of the aircraft, with parachutes partially opened. Mr. Palya's body was also found free of the aircraft with parachute not released.

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0000760-57

14. FACTS: (Contd)

Apparently all three persons left the aircraft too late to successfully utilize their parachutes. (Exhibit G-12).

- u. Inspection of the wreckage that was scattered over an area of two miles failed to disclose any evidence of fire either before or after the crash, except in the case mentioned in paragraph q above. (Exhibit J.)
- v. Nine occupants were fatally injured in the crash. Two persons received minor injuries and two escaped without injury. (Exhibit G-12).
- w. Investigation disclosed that the 3150th Electronics Squadron has not established permanent flying crews in the performance of their experimental flights. The organization had six pilots present for duty at the time of the accident. (Exhibit B-4 Q107).
- x. The passengers and crew including the civilian passengers were not briefed prior to take-off on emergency procedures in accordance with AF Regulation 60-5. (Exhibits B-3 Q55 and 90, C-2).
- y. The Commanding Officer of the 3150th Electronics squadron failed to exercise adequate supervision to insure that his aircraft commanders complied with the briefing requirements for emergency procedures as specified in AF Regulation 60-5. (Exhibit B-4 Q117, 119, 120 and 121).

15. DISCUSSION:

- a. The pilot in feathering the No. 1 engine, inadvertently hit the feathering switch on the No. 4 engine. According to testimony, the copilot immediately pressed the switch to unfeather No. 4, however, since the propeller on the No. 4 engine was found in the feathered position,

15. DISCUSSION: (Contd)

it is believed that his attempt to unfeather this engine was unsuccessful.

[p.7]*

- b. No. 1 engine showed evidence of fire around the right collector ring and supercharger, and considerable melted and burned metal was found throughout the area from the accessory section to the supercharger. The propeller was in the full feathered position.
- c. The burned and damaged state of No.1 engine and examination of the other evidence available did not allow positive establishment of the causes for the fire and drop in manifold pressure. The fire was probably caused, however, by breaks which were found in the right exhaust collector ring. The fire may have been aggravated by non-compliance with Technical Orders 01-20EJ-177 and 01-20EJ-178.
- d. The breaks found in the collector ring also lead to two possibilities which singularly or in combination could have caused the drop in the No. 1 engine manifold pressure.
 - (1) The fire from the collector ring could have burned a hole in the induction system thus permitting a loss in manifold pressure.

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BY RTM DATE 14 SEP. 50

0000760-58

15. DISCUSSION: (Contd)

- (2) The loss of exhaust gases through the breaks in the collector ring could have been sufficient to reduce the effectiveness of the turbo superchargers to a point where they could only maintain 20 inches of manifold pressure.
- e. A possibility for the loss in manifold pressure on No. 2 engine is that the flight engineer inadvertently shut off the fuel for this engine during the process of feathering No. 1. The flight engineer is very positive, however, in his belief that this mistake was not made.
 - f. Two possible causes for the aircraft's entering into a spin are:
 - (1) The pilot inadvertently caused the aircraft to stall. This possibility is discredited, however, by the pilot's experience and by the fact that the copilot observed the aircraft to be in a descending attitude, just prior to its entry into the spin.
 - (2) The large fire in the No. 1 engine may have reduced the lift of the left wing sufficiently to cause the aircraft to fall off into a spin.
 - g. The disintegration of the aircraft which occurred during the spin was probably contributed to by the fire existing in the No. 1 engine.
 - h. The opinions of the maintenance personnel were contradictory; however, the Form 41B bears out the opinions of those who believed that the aircraft required more than the normal amount of maintenance. This aircraft was in commission 48.7% of the time since 1 April 1948, as compared to the Air Force average or 57% of B-29 aircraft in commission for a similar 6-month period.

15. DISCUSSION: (Contd)

[p.8]*

- i. Vibrations reported in the aircraft's Form 41B in several instances could have been contributed to the maintenance required on the fuel system and other portions of the aircraft. These vibrations may or may not have been caused by loose rivets in the horizontal stabilizer undetected because of non-compliance with Technical Order 01-20EJ-99 which requires inspection of these rivets.
- j. Confusion may have existed among the crew during this accident; however, the period of time from the start of the fire until the aircraft entered a spin was very short.
- k. The projects which the 3150th Electronics Squadron were conducting require aircraft capable of dropping bombs and operating at altitudes of 20,000 feet and above.

16. CONCLUSIONS:

- a. The aircraft is not considered to have been safe for flight because of non-compliance with Technical Orders 01-20EJ-177 and 01-20EJ-178.
- b. Fire developed in the No. 1 engine as a result of the failure of the right exhaust collector ring.
- c. AF Regulation 60-5 was violated in that the passengers and crew were not properly briefed.

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0000760-59

17. RECOMMENDATIONS:

- a. That a copy of the memorandum report of this investigation be forwarded to the Commanding General, Air Material Command for information and any action deemed appropriate.
- b. That all Air Force agencies wherein civilian personnel participate in aerial flight in military aircraft be required to indoctrinate these civilians in the proper emergency procedures and in the use of emergency equipment appropriate to the types of aircraft in which they will be flying. This indoctrination should be in addition to and not in lieu of the prior to flight briefings required by AF Regulation 60-5.
- c. That all agencies place special emphasis on the employment of highly qualified maintenance and flight personnel and the establishment of minimum permanent flight crews consisting of pilot, copilot and flight engineer for projects of this nature.
- d. That where ever feasible flight test aircraft be bailed to the commercial concern conducting the test.

[p.9]*

- e. That consistent with normal security measures, the civilian agency concerned be given the privilege of satisfying themselves as to the airworthiness of aircraft in which they are flying when bailment is not feasible.

[* The following stamps and marginalia are found on page 9 of the original document:]

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TO RESTRICTED

RESTRICTED

BY AUTHORITY OF AFR 205 -1

~~SECRET~~

BY RTM DATE 14 SEP. 50

0000760-60

17. RECOMMENDATIONS: (Contd)

- f. That copies of official AF accident reports not be sent to civilian agencies.

18. STATEMENT OF REBUTTAL: Not applicable.

JOHN W. PERSONS
Colonel, USAF
Chief, Flying Safety Division

[p.1]*

AFGAI-40

MEMORANDUM FOR THE CHIEF OF STAFF, UNITED STATES AIR FORCE

THRU: Deputy Chief of Staff, Materiel

SUBJECT: Aircraft Accident Involving TB-29-100XX No. 45-21866

1. Narration of Events: On 6 October 1948 B-29 No. 45-21866, piloted by Capt. Ralph W. Irwin, AO-666261, took off from Robins AFB, on a research and development mission. The flight was to be a 5-hour mission for the purpose of completing an electronics project assigned to the organization. The loading list included the crew of 8 and 5 civilian technical representatives affiliated with the project. Three of the civilians were employed by the Radio Corporation of America and two by the Franklin Institute of Technology. The normal preflight and before takeoff checks were made by the crew and the takeoff and climb to 18,500 feet was without incident. Upon reaching approximately 18,500 feet the manifold pressure on No. 1

[* The following stamps and marginalia are found on page 1 of the original document:]

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engine dropped to about 20 inches. An attempt to bring it back by the use of the manual emergency system and by replacing the turbo amplifier was ineffective so the engine was feathered. The crew was advised by the pilot to put on their parachutes and a descent and depressurization were started. During the process of feathering No. 1 a fire broke out that engulfed the aft half of the engine and the flames extended past the left scanner's window. Attempts to extinguish the fire by use of the engine fire extinguishers were to no avail. The manifold pressure on engine No. 2 then dropped to approximately 20 inches and about this time the main landing gear switch was activated and then the bomb bay doors were opened. Coincidental with the opening of the bomb bay doors the aircraft went into a spin to the left. The aircraft entered the spin violently and the centrifugal forces developed made movements by the personnel difficult. Two occupants in the forward compartment and two in the waist were able to abandon the aircraft and successfully opened their parachutes. The remaining six in the waist compartment and three in the forward compartment were later found in or near the wreckage which was located approximately 2 miles south of Waycross, Georgia.

[p.2]*

2. Discussion and Facts:

- a. The two civilians from the Franklin Institute of

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Technology, Mr. Brauner and Mr. Meckler, had never previously flown with the organization and there was no record of previous B-29 flying time.

b. The crew members had not previously flown together as a crew prior to the date of the accident. However, the members of the crew were well qualified individually.

c. The 3150th Electronics squadron does not establish permanent flight crews for their B-29 aircraft flights. The organization had six pilots present for duty at the time of the accident and this was believed insufficient to establish fixed crews and still maintain pilot proficiency.

d. The passengers and crew were not briefed prior to takeoff on emergency procedures in accordance with AF Regulation 60-5.

e. The Commanding Officer of the 3150th Electronics Squadron did not exercise adequate supervision to insure that his aircraft commanders complied with the briefing requirements for emergency procedures as specified in AF Regulation 60-5.

f. The pilot in feathering the No. 1 engine, inadvertently hit the feathering switch on the No. 4 engine. According to testimony, the copilot immediately pressed the switch to unfeather No. 4, however, since the propeller on the No. 4 engine was found in the feathered position, it is believed that his attempt to unfeather this engine was unsuccessful.

g. Technical Orders 01-20EJ-177 and 01-20EJ-178, dated 1 May 1947, were not complied with. These Technical Orders provide for changes in the exhaust manifold assemblies for the purpose of eliminating a definite fire hazard.

h. No. 1 engine showed evidence of fire around the right collector ring and supercharger, and considerable melted and burned metal was found throughout the area

from the accessory section to the supercharger. The propeller was in the full feathered position.

i. The burned and damaged state of No. 1 engine and examination of the other evidence available did not allow positive establishment of the cause for the fire and drop in manifold pressure. The fire was probably caused, however, by breaks which were found in the right exhaust collector ring. The fire may have been aggravated by non-compliance with Technical Orders 01-20EJ-177 and 01-20EJ-178.

[p.3]*

j. The breaks found in the collector ring also lead to two possibilities which singularly or in combination could have caused the drop in the No. 1 engine manifold pressure.

(1) The fire from the collector ring could have burned a hole in the induction system thus permitting a loss in manifold pressure.

(2) The loss of exhaust gases through the breaks in the collector ring could have been sufficient to reduce the effectiveness of the turbo superchargers to a point where they could only maintain 20 inches of manifold pressure.

k. A possibility for the loss in manifold pressure on No. 2 engine is that the flight engineer inadvertently shut off the fuel for this engine during the process of feathering No. 1. The flight engineer is very positive, however, in his belief that this mistake was not made.

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l. Two possible causes for the aircraft's entering into a spin are:

(1) The pilot inadvertently caused the aircraft to stall. This possibility is discredited, however, by the pilot's experience and by the fact that the copilot observed the aircraft to be in a descending attitude, just prior to its entry into the spin.

(2) The large fire in the No. 1 engine may have reduced the lift of the left wing sufficiently to cause the aircraft to fall off into a spin.

m. Testimony indicates that all of the personnel had been alerted to prepare to abandon the aircraft and had donned their parachutes prior to its entry into the spin.

n. Movement of personnel in the aircraft was greatly restricted by the centrifugal force of the spin and only the left scanner, Sgt. Peny, and a civilian technician, Mr. Mecklar, were able to successfully abandon the aircraft from the rear compartment. The copilot, Capt. Moore, and the flight engineer, T/Sgt. Murrhee are the only persons that successfully parachuted from the forward compartment.

[p.4]*

o. The disintegration of the aircraft which occurred during the spin was probably contributed to by the fire existing in the No. 1 engine.

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p. The aircraft had completed a 100 hour inspection 15 hours prior to this flight and was in a satisfactory condition except for technical order non-compliance.

q. The opinions of the maintenance personnel were contradictory; however, the Form 41B bears out the opinions of those who believed that the aircraft required more than the normal amount of maintenance.

r. Vibrations reported in the aircraft's Form 41B in several instances could have contributed to the maintenance required on the fuel system and other portions of the aircraft. These vibrations may or may not have been caused by loose rivets in the horizontal stabilizer undetected because of non-compliance with Technical Order 01-20EU-99 which requires inspection of these rivets.

s. Confusion may have existed among the crew during this accident; however, the period of time from the start of the fire until the aircraft entered a spin was very short.

t. The projects which the 3150th Electronics Squadron were conducting require aircraft capable of dropping bombs and operating at altitudes of 20,000 feet and above.

3. Recommendations:

a. That a copy of the memorandum report of this investigation be forwarded to the Commanding General, Air Material Command for information and any action deemed appropriate.

b. That all Air Force agencies wherein civilian personnel participate in serial flight in military aircraft be required to indoctrinate these civilians in the proper emergency procedures and in the use of emergency equipment appropriate to the types of aircraft in which they will be flying. This indoctrination should be in addition to and not in lieu of the prior to flight briefings required by AF Regulation 60-5.

c. That all agencies place special emphasis on the establishment of a minimum permanent flight crew consisting of pilot, copilot and flight engineer for B-29's and larger aircraft when civilian personnel are to be carried.

[p.5]*

d. That where ever feasible flight test aircraft be bailed to the commercial concern conducting the test.

e. That consistent with normal security measures, the civilian agency concerned be given the privilege of satisfying themselves as to the airworthiness of aircraft in which they are flying when bailment is not feasible.

f. That copies of official AF accident reports not be sent to civilian agencies.

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[p.1]*

**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON**

Flying Safety Division
Office of The Air Inspector
c/o Inspector General, First Region
Langley Air Force Base
Langley Field, Va.

AFCAI-4G

SUBJECT: Summary of B-29 Aircraft Accident

TO: Commanding General
Strategic Air Command
Offutt Air Force Base
Fort Crook, Nebraska

1. A special investigation of a B-29 aircraft accident near a southern Air Force Base revealed that as the aircraft reached 18,500 feet at climbing power, the manifold pressure on No. 1 engine suddenly dropped to 20 inches. Emergency attempts to restore manifold pressure were unsuccessful. Further investigation disclosed that the pilot, in feathering No. 1 engine, inadvertently hit the feathering switch on No. 4 engine. At this time it was observed that the access door on No. 1 engine was

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AFCAI-4G, "Summary of B-29 Aircraft Accident," (Contd)

turning brown from excessive heat. The fire extinguishers were used without effect and then a severe engine fire was observed. While No. 1 engine was being feathered the manifold pressure on No. 2 engine decreased to approximately 20 inches. The main landing gear switch was actuated and the bomb bay doors were opened. The crew was alerted to abandon the aircraft and a short time thereafter the aircraft went into a violent spin to the left. Two occupants in the forward compartment and two in the waist were able to abandon the aircraft and successfully open their parachutes. The remaining nine personnel were killed when the aircraft crashed.

2. Findings:

- a. The aircraft commander, copilot and engineer had not flown together as a crew prior to this flight.
- b. The crew and civilian technicians on board were not briefed by the aircraft commander on emergency procedures prior to takeoff.
- c. The commanding officer of the squadron to which the aircraft was assigned failed to initiate follow-up action to determine whether his aircraft commanders were complying with existing regulations regarding briefing passengers and crew prior to takeoff.

[p.2]

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AFCAI-4G, "Summary of B-29 Aircraft Accident," (Contd)

- d. Technical Orders 01-20EJ-177, 01-20EJ-178 and 01-20EJ-99 were not complied with. The first Technical Order stated provides for changes in the exhaust manifold assemblies for the purpose of eliminating a definite fire hazard.
 - e. No. 1 engine showed evidence of fire around the right collector ring and supercharger; however, the burned and damaged state of the engine did not allow for positive establishment of the causes for the fire and drop in manifold pressure. The fire was probably caused, however, by breaks which were found in the right exhaust collector ring. The fire may have been aggravated by non-compliance with Technical Order 01-20EJ-177, in that heat shields were not installed at the rear lower cowl assembly to prevent excessive heat from entering the accessory section.
 - f. Vibrations reported in several instances may or may not have been caused by loose rivets in the horizontal stabilizer because of non-compliance with Technical Order 01-20EJ-99 which requires inspection of these rivets.
3. The Accident Investigation Board concluded that the most probable cause factor for this accident was the failure to comply with Technical Order 01-20EJ-177.
 4. The circumstances surrounding this accident are brought to your attention for your information and guidance.

BY COMMAND OF THE CHIEF OF STAFF:

MURL ESTES
Lt. Colonel, USAF
Deputy Chief,
Flying Safety Division

[p.1]*

TESTIMONY OF HERBERT W. MOORE, JR.,
CAPTAIN, USAF

Given to Robert J. D. Johnson, Major, USAF, Investigating Officer, Inspector General, First Region, Langley Air Force Base, Langley Field, Virginia, at Headquarters, Warner Robins Air Material Area, Robins Air Force Base, Robins Field, Georgia, on 11 October 1948.

Having been duly sworn and advised of his rights under the 24th Article of War, the witness was examined and testified as follows:

1Q Will you state your name, rank, serial number and duty assignment?

A Herbert W. Moore, Jr., Captain, USAF, A048322, Adjutant, 3150th Electronics Squadron.

2Q Captain Moore, will you give your flying experience in B-29 Aircraft?

A Approximately 100 hours. I can only guess that I have made 10 landings, have probably sat through maybe 30 of them.

3Q Are you a qualified B-29 first pilot?

A No, sir.

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4Q Have you previously flown with Captain Erwin?

A Yes, sir.

5Q To your knowledge, has the crew to include Sergeant Murrhee, Sergeant Peny flown with Captain Erwin and yourself on a previous mission? Have you ever flown as a crew?

A I don't really know, sir, I really don't.

6Q Have you ever flown with Sergeant Murrhee, Sergeant Peny or Sergeant York before?

A I probably have, but not going as first pilot, some of those names I just know the man, but can think of people I have flown with. Just don't know if I have flown with them before.

7Q Is it a policy or practice of the 3150th Electronics Squadron to have established crews, or according to the needs, do you just pick people who aren't doing anything to go on a particular flight?

A As I understand it, there are established crews but we haven't been able to keep to that because of shortage of primarily officer personnel, There [p.2]* are regularly assigned flight engineers and crew chiefs, but I think even they alternate. On flight engineers, I am sure.

8Q On the 6th of October, who conducted the briefing of the passengers prior to the take-off?

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A I was late getting out there, sir, but Captain Erwin was there. I wasn't there for any briefing. When the flight was originally scheduled to go out in the morning at 8 o'clock and Captain Erwin had started the briefing then and checked the names of those that were there, checked them with the flight clearance, etc. I don't know if any further briefing was conducted because of the trouble they had with number four engine, which caused the flight to be cancelled.

9Q What was the trouble that you experienced with number four engine?

A There was a gasket that had to be replaced. I don't know just what gasket.

10Q Will you give in as much detail as you can recall the complete flight from the time of take-off until you abandoned the aircraft? It is quite important that you get as much detail in the proper sequence as you can remember.

A Well, the normal procedure was accomplished in starting the engines, and prior to taxiing out, the engineer reported that number two was running a little hot, whether that was oil temperature or head temperature, I don't know, but Captain Erwin was aware of it and favored that engine on taxiing out. On the engine run-up, number one checked alright and number two showed a magnetto drop of 100 RPM, then we checked three and four and they appeared alright. The power check, Captain Erwin elected to use number two because it showed the RPM drop, so he went at a full throttle with turbo on for approximately four seconds, which is a little longer than normal, to see if there was any loss of power. There was none, and I didn't think anything of it and neither did Captain Erwin. The take-off was normal and there was no loss of power after take-off, with gear up, flaps up, power was reduced to 43 inches and 2400 RPM. We had to climb through or around some light cumulus and I noticed that Captain Erwin was holding 185 IAS. The engineer reported one, two and four engines as running a little hot. At about that time, we cleared of the

clouds and Captain Erwin either reduced or let the manifold pressure come down to 40 inches during the climb and increased his air speed to 195. As nearly as I can recall, there was no further report of any trouble or malfunction of the engines until we reached about 18,500 or 19,000 feet. At that time either Captain Erwin or the engineer reported that the manifold pressure on number one had dropped to 23 inches. A conversation started between Captain Erwin and the engineer about the engine, and the engineer reported that the fuel consumption on that engine had dropped to, I believe, 125 gallons per hour. Captain Erwin then asked how the other instruments on that engine were reading; the engineer said that all appeared normal. I believe at about this time that Captain Erwin advised [p.3]* everybody to have their chutes on. Captain Erwin didn't think that there was too much cause for alarm, at least I believe he didn't, and I know I didn't, but we did put out our cigarettes then. I can only guess the time lapse between our noticing the trouble with number one engine and the time we reached 20,000 feet. When we reached 20,000 feet, Captain Erwin reduced power to 31 inches on the other three engines and I reduced the RPM to 2100. Then Captain Erwin asked the engineer to try to bring up the manifold pressure on number one manually. It hadn't fluctuated as I recall, held at 23. Then it was 23 on Captain Erwin's and 25 on the engineer's or vice versa. The engineer brought the manifold pressure up manually and I saw the indicator come up to 31 inches

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and then start falling right back to 23. Then Captain Erwin said he would feather number one. Captain Erwin was looking out the window at number one engine as he reached for the feathering button and accidentally pushed the number four feathering switch. I immediately pressed the switch, unfeathering. This was almost simultaneous with his pressing the switch to feather. He then pressed the feathering switch on number one. The engineer reported that fuel shut-off valves were closed, booster pumps were off, the mixture control to idle cut-off.

11Q Did he chop the throttle first?

A That I couldn't see. At the time Captain Erwin elected to feather number one, he put the plane in a descending attitude. I remember feeling the slight vibration that goes with an engine feathering. Captain Erwin ordered the cabin pressure released. Captain Erwin then told the left scanner to keep his eye on that engine and watch for possible outbreak of fire. The scanner immediately reported smoke coming from some part of number one engine. Captain Erwin then told the engineer to pull the fire extinguisher on that engine, which he did, and the scanner reported that the smoke disappeared, but came back almost immediately accompanied by a rapidly spreading fire. About a minute seemed to have gone by and I had not heard any cabin pressure released. I knew that it would be accompanied by either a noise or feel a pressure on the ears. I unbuckled my seat belt and turned around to look at the engineer and see what was going on and asked him if he has released the pressure. He said he had. Somebody then said to open the hatch leading into bomb bay; I realize now that it would be futile to try to get that door open without first releasing the pressure. Still nobody seemed to be doing anything, so I got up, took a step towards the bomb bay hatch. At about the time I took a step toward the hatch, Lieutenant Pence just turned to the door and it blew open. In stepping back across the nose-wheel door, I asked the engineer if he had dropped the nose-wheel. He said yes, so I

reached down to get the door open and somebody, either Lieutenant Pence or Sergeant Walker, came up and hooked the door in the up position, and I saw that the gear was still in the fully retracted position, so I pressed the gear down switch on the pilot's panel, and at the same time, Captain Erwin said what's wrong with number two, so I looked out the nose of the plane and could see that we are in a not too severe dive and about a twenty degree bank to the left and I noticed that Captain Erwin had a little more than half right aileron control, then he opened the bomb bay doors with the switch on the pilot's panel. It must have been at this time that the airplane was thrown into the spin. I was thrown forward against the bombardier's seat, facing to the rear. I can remember seeing someone standing by the nose-wheel escape hatch, holding on to one of the upright posts on the inside of the [p.4]* door. There was no confusion, and as I recall, not a word was being said by anyone at this time. I pulled myself back to the nose-wheel escape hatch and saw someone lying face-up in the well. The nose gear had extended partially but not enough to allow escape. I got a foot down in there and kicked that person on through. The person standing above me said "go", and I didn't hesitate and went on through after the person that I had pushed out.

12Q Was a feathering check made prior to take-off?

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A I don't believe it was. Along that line, in one of the transition rides I had here, I started to make a feathering check one time and was told that you don't check the feathering switches with this particular type feathering system because you can only feather, unfeather and feather.

13Q Do you know whether they are electrical?

A This one airplane we were in has the electric, I think. Believe it is Curtis, most of them have the Hamilton.

14Q Did you actually see number one in the feathered position?

A No, sir, I couldn't from my position

15Q Was there any report received from the scanner up until the time you feathered number one engine?

A As nearly as I can recall, No, although Captain Erwin had been looking out the window at the engine from his position.

16Q Do you recall the position of the cowl flaps?

A No, sir.

17Q Did you personally observe any smoke or fire from number one?

A No sir.

18Q When you were thrown forward by the bombardier's seat, did Captain Erwin appear to be having difficulty maintaining control?

A He wasn't fighting the controls. At the time he reached for the bomb bay door switch, there was no grabbing, was looking around the cockpit, etc.

19Q When you were thrown forward by the bombardier's seat, did you observe him having difficulty maintaining control?

A I don't recall seeing him make any definite movements.

20Q When the hatch to the bomb bay was opened, were the bomb bay doors open at that time?

[p.5]*

A No, sir.

21Q Did Captain Erwin open the bomb bay doors after you were thrown forward by the bombardier's seat?

A No, sir, it was before I was thrown forward.

22Q Did you actuate the main landing gear switch in the pilot's compartment?

A Yes, sir.

23Q Did you make any observations out to the right toward number three or four engines that were unusual?

A No, sir, I was stooped down right beside co-pilot's seat.

24Q Did Captain Erwin give the order to abandon the aircraft?

A I had been off interphone since going back to the rear and did not hear him give the word to abandon the aircraft.

25Q What prompted you to leave?

A I was sitting there doing absolutely nothing and nobody seemed to be doing a thing. I knew you had to get these doors open and thought well, let's do something.

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26Q In actually abandoning the aircraft, why did you leave, did you see fire?

A When I was thrown forward and the airplane was in the spin, the centrifugal force, first experience I had had expect in training plane, and from the position I was in, I just didn't see what else could be done except to make for it.

27Q Did you observe Captain Erwin attempting to leave the pilot's seat?

A No, sir.

28Q Was there any smoke or fire in the pilot's compartment?

A No, sir.

29Q Can you state for sure which wing it fell off on?

A Was definitely on the left wing and the spin was to the left, too.

30Q Had you retracted the flaps?

A Flaps come up after take-off. Flaps at the time of the emergency were not let down.

[p.6]*

31Q Did you hear any report from the rear of fire, yourself?

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A At this time the scanner at the time pulled fire extinguisher, remember him saying the smoke disappeared and then it came back on.

32Q At the time Captain Erwin remarked what was wrong with number two, did you hear any further conversation with regard to number two engine?

A No, sir, I tried to see the instrument panel, but do not recall what I saw on it. It was all at the same time that I looked through the nose to see the attitude of the plane and the amount of control Captain Erwin had on the aileron.

MOORE

[p.7]*

TESTIMONY OF EARL W. MURRHEE,
Technical Sergeant, USAF

Given to Robert J. D. Johnson, Major, USAF, A037150, Investigating Officer Inspector General, First Region, Langley Air Force Base, Langley Field, Virginia at Headquarters, Warner Robins Air Material Area, Robins Air Force Base, Robins Field, Georgia, on 11 October 1948.

Having been duly sworn and advised of his rights under the 24th Article of War, the witness was examined and testified as follows:

33Q Will you state your name, rank, serial number and duty assignment?

A Technical Sergeant Earl W. Murrhee, serial number 14171471, my duty is flight engineer. Duty when not flying is inspector.

34Q Are you a graduate of an accredited AM school?

A I went through an aircraft sheet metal course while working for Pan-American Air Ferries and at the time of the Army taking the air ferrying over, was November 1, 1942, we enlisted in the Air Force. In fact, most everyone did there, and at the time they had a shortage of mechanics on the line and I went on the line for eight months line duty in order to receive my AM rating.

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35Q Approximately how long have you been working with B-29's?

A Since July 1944.

36Q Approximately how much flying time do you have as a B-29 engineer?

A Somewhere around 500 hours. Not positive, just a rough estimate.

37Q Had you ever flown with Captain Erwin prior to the 6th of October?

A No, sir, first flight.

38Q Were you assigned as flight engineer on the morning flight that was cancelled?

A Yes, sir.

39Q What was the reason that the flight was cancelled?

A The civilian electronic engineers had not arrived on the field, that was my understanding. I was out at the plane until the flight was cancelled, went in to see the operations officer to see when flight was going and he said had been cancelled until 1 o'clock.

40Q Did you make the pre-flight inspection?

[p.8]*

[* The following stamps and marginalia are found on page 8 of the original document:]

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A Yes, sir we pressure checked all four engines in the morning and found one fuel leak, number four engine, right fuel injection pump at float seal and that was cleared up immediately.

41Q When you say cleared up, what do you mean by that?

A I mean seal was replaced and pressure checked and there was no leak.

42Q Were you aware of any mechanical defect at the time the flight was postponed until later in the afternoon.

A No, sir.

43Q What did your briefing consist of prior to the take-off by Captain Erwin?

A Captain Erwin arrived at the airplane and checked his clearance to make sure that each man was present and had his parachute. That's before boarding the plane and he made his rounds, walked around landing gears and engines before he got into the plane.

44Q Did you as flight engineer brief anyone on escape hatches and emergency exits?

A The Air Force personnel was well-informed in the case of emergency what they were supposed to do. The civilian personnel, I had nothing to do with, do not know what they knew or anything like that.

45Q To your knowledge, did anyone brief the civilian personnel in regard to emergency procedure?

A Some had just come down, whether they had been briefed, I do not know. Some had been briefed, that was the regular men of the Field here that stay in our squadron all the time, Mr. Reynolds and Mr. Paula.

46Q In accomplishing the daily pre-flight, did you check your prop feathering?

A Yes, sir, they are electric and can check those without engines going. They are not pre-flighted. Usually wait until the pilot is present before we make our engine run-ups, that's prior to take-off.

47Q Will you give us a brief discription in detail of everything that occurred from the time you took off until the emergency, keeping in mind the sequence and conversations that you overheard from the others?

A From the ground up, sir, it was perfectly normal, that is the instruments were all normal. We had no indication of trouble of any type until we [p.9]* got up 20,000 feet and the pilot was preparing to level off, and before any power reductions were made, number one engine lost manifold pressure, dropped to 20 inches. I used emergency to bring it back up, that is manually, to 30 inches and it would not hold. By that time, Sergeant York, crew chief, had come up front and he changed the amplifier, that is number one engine, and I asked for report from scanners. Left scanner, Sergeant Peny reported back that number one engine looked ok to him visually. At that time, Captain Erwin decided to feather number one and number one engine was feathered. I noticed the access door of the accessory section was turning a light brown.

[* The following stamps and marginalia are found on page 9 of the original document:]

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0000760-77

48Q Would you give me the sequence in feathering?

A The pilot pushed the feathering button in and I immediately pushed the fuel shutoff valve to the off position, also turning off tank and engine fuel shutoff valves and pulled fire extinguisher. The fire seemed to stop momentarily. I glanced at number two engine instruments and number two engine was losing manifold pressure same as number one did. Informing Captain Erwin, Captain Erwin suggested to hold feathering of number two. At that time, the fire in number one engine, there was a blaze coming out of number one engine out of the cowling, accessory, and I had a report from the scanner that it was coming out of the oil cooler which is on the bottom. At that time Captain Erwin ordered everyone to stand by to abandon ship. This all happened in a second, sir. Captain Erwin pulled the emergency depressurizing valve, opening bomb bay doors at the same time, which seemed to throw the airplane violently to the right. Captain Erwin or Captain Moore, not positive, but one of them said to abandon ship. At that time the lunge threw me on my back in the engineer's seat. Captain Moore helped to open the lower hatch door and the next movement of the airplane threw me into the hatch and I got out as soon as possible through the lower hatch. Captain Moore told me that he kicked me out. I was stuck in the hatch. On opening my parachute, the airplane was to the rear of me and the next thing I heard was a puff and the airplane went down. It hit the ground before I did. The puff was a mid air explosion. There was pieces around me, I saw landing gears and everything in the air, exactly how it hit the ground, I don't know. I landed in a creek. Captain Moore landed approximately 150 feet in front of me. We both walked over to the plane and Captain Moore left immediately as soon as he looked the plane over, to make a phone call. At that time, I saw Sergeant Peny being carried off by some civilians. He was walking but was being helped by some civilians. I went over to see the extent of his injury. At that time the civilians noticed blood on the back of my head and advised me to let them take me to the hospital also,

but before leaving, a State Trooper and a Marine Sergeant were keeping the people back from the plane and that's just about all I remember about the plane. I stayed in the hospital until I was brought back that night.

49Q Had you cut back to your cruise setting at the time you noticed the loss of manifold pressure in number one?

[p.10]

A No, sir.

50Q Do you recall what your generator's readings were at this time?

A Particularly on number one, No, sir, I don't.

51Q What was your indicated air speed?

A 195, sir. I believe there is a five mile difference between my air speed indicator and the pilot's.

52Q What was the position of the cowl flaps?

A Approximately seven degrees, sir.

53Q Open?

A Yes, sir.

54Q What is the maximum travel of your cowl flaps?

A 6½ inches.

[* The following stamps and marginalia are found on page 10 of the original document:]

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0000760-78

55Q In degrees?

A I am sorry, but don't remember off hand, do know, but can't think right now.

56Q What indication did you get from your fuel flow meters?

A They became erratic and we lost manifold pressure. Wouldn't say excessively just number one.

57Q Where the booster pumps on?

A Yes, sir.

58Q Were your cylinder head temperatures higher than normal?

A No, sir, highest was number four which was 205.

59Q What were your oil temperature readings?

A I believe, sir, approximately 80, between 75 and 80.

60Q Was there any abnormal instrument indications on any engines prior to the time you noticed the drop of manifold pressure in number one?

A No, sir, with the exception of number three, believe fuel flow motor showed it was using a little more fuel than the other engines. I mean approximately thirty gallons.

61Q What is the rate of the fuel flow?

[p.11]*

[* The following stamps and marginalia are found on page 11 of the original document:]

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0000760-79

A For that power setting, one, two and four was using around 210 per hour and number three approximately 240 per hour. That was 2400 RPM, 39 inches manifold pressure.

62Q Did you handle the throttle?

A Pilot handles the throttle entirely. Only thing I handle is fuel mixture and power shutoff valves in feathering an engine.

63Q Did you observe the throttle being retarded before feathering?

A Yes, sir, he brought the throttle back slightly, not completely off, at one time before pushing the feathering button.

64Q Did he at any time return the throttle to open position?

A No, sir, don't believe he did. The throttle was pulled back because he reduced RPM. Manifold pressure had dropped, but he still had RPM on engine.

65Q You say that the aircraft was turned to the right, did you notice the flight instruments?

A No, sir, unable to because of the way I was thrown.

66Q Where were you thrown?

A I was practically lifted up and laid down in my seat, thrown to the left, looking back. I was facing the rear. The airplane was in a right bank and when it went out of control, still went further to the right, sir, and after that, I really don't know what happened to the instruments.

67Q Did you hear any explosion prior to leaving the aircraft?

A No, sir.

68Q Was there any smoke in the cockpit?

A No, sir.

69Q Could you actually see the flames coming out of the engine?

A Yes, sir.

70Q How long would you estimate it was from the time you feathered until the time that you noticed the discolor on the access door?

A Just a second sir.

71Q But all that time the fuel pressure indicator was holding up?

[p.12]*

A It was either feathered or being feathered. I looked up, and had completed my end of the feathering. Looked out and seen fire, informed the pilot.

72Q Pilot did definitely lead in the feathering procedure?

A Yes, sir.

73Q He reduced the throttle and hit the feathering switch?

A Yes, sir, would say we did it together, sir. The airplane engine itself was feathered in the proper way. If I may say so, I flew transition training flights approximately a year and a half in Birmingham Alabama; we flew practically day and night, checking out crews for ferrying purposes and

[* The following stamps and marginalia are found on page 12 of the original document:]

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0000760-80

we feathered props during our training course numbers of times and that's why I can state that we did feather the prop. We never had the opportunity to feather number two, sir.

74Q Had you ever had an engine fire before?

A No, sir, first fire. Have lost engines, but no fires.

75Q What manifold pressure can you obtain on the ground without turbo?

A Approximately 40 inches.

76Q Is there only one set of feathering switches?

A One set, sir. One for each engine.

77Q Did you make any observations on, the number three or four engines?

A Visually, sir. Have a thirty minute report from scanner and I can see three and four engines fairly well from my position in the plane.

78Q Did you happen to look over there at the time number one was feathered?

A No, sir.

79Q Previously?

A No, sir.

80Q Was Sergeant York right scanner?

A Yes, sir. Sergeant Irvin, sir, I believe had replaced him. In fact he had been in the rear for some time discussing the auto pilot with the radar men.

81Q Your instruments didn't reveal anything unusual for No. 3 and 4 engines?

[p.13]*

A No, sir, not a thing with the exception of the fuel. We held the same power setting after take-off until we reached 20,000 feet.

82Q Were you aware that Captain Erwin inadvertently hit number four feathering button?

A No, sir.

83Q Did this B-29 have the high pressure bomb bay door opening?

A Yes, sir, 1500 pounds.

MURRHEE

[* The following stamps and marginalia are found on page 13 of the original document:]

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0000760-81

[p.14]*

TESTIMONY OF WALTER J. PENY,
STAFF SERGEANT, USAF

Given to Robert J. D. Johnson, Major, USAF, A037150, Investigating Officer, Inspector General, First Region, Langley Air Force Base, Langley Field, Virginia, at Headquarters, Warner Robins Air Materiel Area, Robins Air Force Base, Robins Field, 1, Georgia, on 11 October 1948.

Having been duly sworn and advised of his rights under the 24th Article of War, the witness was examined and testified as follows:

84Q Will you state your name, rank, serial number and duty assignment?

A Walter J. Peny, Staff Sergeant, 6980255, I am 747 at the present time, 747 is mechanic, primary 750.

85Q Are you a graduate from an accredited Air For[ce] AM school?

A No, sir, lacked a month. I was in Panama at the time and our outfit moved.

86Q Approximately how much flying time do you have in the capacity of scanner of B-29?

A Well, I would say approximately 200 hours.

[* The following stamps and marginalia are found on page 14 of the original document:]

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0000760-82

87Q Prior to the 6th of October, had you ever flown with Captain Erwin or Sergeant Murrhee?

A I know I have flown with Sergeant Murrhee but do not remember off hand whether I have flown with Captain Erwin but imagine I have.

88Q Prior to the take-off on 6 October, were you briefed by the pilot, Captain Erwin?

A No, sir, not that I recall.

89Q Did you brief the civilian passengers in the rear in regard to escape hatches, use of parachutes or emergency procedures?

A No, sir.

90Q Did you observe or overhear anyone else briefing them?

A No, sir, the only thing that I remember was the civilian who followed me through the escape hatch, the one who got out, claimed that he didn't even know how to get out of a B-29.

[p.15]*

91Q Had you ever flown with any of the civilian passengers before that were on the loading list the 6th of October?

[* The following stamps and marginalia are found on page 15 of the original document:]

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0000760-83

A I think two of them are radar personnel, do not remember what their names are.

92Q Was your position that of left scanner on take-off?

A Yes, sir.

93Q Did you make any reports on the take-off or on the climb to the pilot or engineer?

A Prior to take-off, we gave control check and on take-off, gave flight check, landing gear check and engine report. At that time engines were operating properly.

94Q In as much detail as you can will you start from your first observation that was requested by Captain Erwin and give all the conversations and sequence of events that happened until you abandoned the aircraft?

A Well, the first incident I remember the engineer stated that he was losing power, manifold pressure and RPM on number one. The engineer called me for a report in regard to number one engine and at that time everything was normal. Immediately following, the access door to the accessory section turned a brown color. At that time the engineer had begun feathering the prop. At the same time a fire broke out in the oil cooler and I reported that to the engineer. The engineer used up two fire extinguishers, which momentarily extinguished number one fire. In approximately five or six seconds, fire broke out completely over number one engine and pilot reported to me to notify the crew to put on their parachutes and get ready to bail out. At the same time the bomb bay doors were opened. The engineer notified the pilot that number two engine was losing RPM and manifold pressure. At that time it seemed to me that the whole wing was enveloped in a flame and the ship went into a spin. I unfastened my buckle and lunged for the escape hatch to the bomb bay, and it seems while I was trying to open the bomb bay escape hatch that I blacked out momentarily and the next thing I remember is going through the hatch. I pulled the rip cord

and the chute opened, and my right arm was caught in the chute line. I finally managed that loose and landed in the swamp approximately a mile from the airplane. Somebody depressurized the airplane just before the wing was enveloped in a flame.

95Q Did Captain Erwin or anyone give you the order to abandon the aircraft?

A I never received that order, sir.

96Q Did you hear any explosion before you left the airplane?

[p.16]*

A No, sir, seems a few seconds after I left I heard a puff in the skies, that's all. A piece of metal flew by the parachute. Never noticed the ship or the men.

97Q Did you notice the position of any of the other passengers when you were attempting to open the escape hatch?

A No, sir, I could not, but remember on leaving my seat, the right scanner, Sergeant Irwin, was standing. At the time it was on fire, the civilians were getting their chutes on. They were sitting up next to the escape hatch.

98Q What type of chutes did the civilians have?

A Same as we had, back-pack.

[* The following stamps and marginalia are found on page 16 of the original document:]

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0000760-84

99Q Can you remember whether the prop was feather[ed] before you noticed the access door turning brown?

A No, sir, the prop was being feathered at that time, and the prop was finally fully feathered.

100Q The access door turned brown?

A Yes, sir.

101Q You were in the left scanner's position?

A Yes, sir.

PENY

[p.1]*

B/L fr. WRAMA dtd 28 oct 48 subj: "Exhaust Bracket"

1st Ind

MCMM/TBMcD/jes

HQ AMC. Wright-Patterson AF Base,
Dayton, Ohio

3 December 1948

TO: Commanding General, Warner Robins Air
Materiel Area, Robins Air Force Base, Warner Robins,
Georgia

1. The following conclusions have been reached in
connection with the basic letter and inclosure:

a. In view of the condition of the exhibit, no conclusive
evidence of the cause of the fire was determined.
The following are probable conditions which might
have caused the fire:

- (1) If the crack in the tailpipe clamp progressed
enough to permit the tailpipe to part sufficiently
to allow exhaust gas to leak into the accessories
section, fuel fumes could have been ignited and
caused the fire.
- (2) If Technical Order 01-20EJA-177 has been
complied with, undoubtedly the heat shrouds
for cabin hot air have been removed and the
exhaust tailpipes are then unprotected in the
accessories section. Fuel leakage could have
gotten on the hot tailpipes and started the fire.
Heat from the fire could have distorted the
tailpipes and clamps allowing exhaust tailpipe
gases to escape into the accessories section
further adding to the fire.

[* The following stamps and marginalia are found on
page 1 of the original document:]

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62a

- b. It might also be noted that this is the first report of a failure of this type received by this Unit. There have been other exhaust system failures reported but they have pertained specifically to nipples and collector ring parts.

BY COMMAND OF GENERAL McNARNEY:

/s/ [Illegible] Col. USAF
THOMAS B. McDONALD
Brigadier General, USAF
Chief, Maintenance Division

1 Incl.
n/c

[p.1]*

**HEADQUARTERS
WARNER ROBINS AIR MATERIEL AREA
ROBINS AIR FORCE BASE
Office of the Commanding General**

ROBINS FIELD, GA
Dec 14 1948

SUBJECT: Supplemental Aircraft Accident Report, TD-29,
Serial No. 45-21866.

TO: Commanding General
WRAMA, Robins AFB
Robins Field, Georgia

1. A complete investigation has been made of No. 1 engine of subject aircraft that crashed at Waycross, Georgia, 6 October 1948, as a result of an engine fire in this engine, and subsequent loss of control by the pilot. This report is submitted as a supplemental report to the AAF Form 14 that has already been completed and forwarded for the accident. A brief description of the accident is as follows:

a. Normal climb was made to 18,000 ft. when the manifold pressure on No. 1 engine dropped from 39" to 20". The manual supercharger control was used and a momentary surge to 30" resulted, but immediately returned to 20". The pilot elected to feather No. 1 engine but pressed No. 4 feathering switch; the co-pilot grabbed the pilot's hand, returned the No. 4 switch to an unfeathered position and then feathered No.1 engine. The engineer reported the fuel shut off, booster pump off, and mixture control in idle cut off. At this time, it was observed that the

[* The following stamps and marginalia are found on page 1 of the original document:]

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C-10-6-4

access door to the accessory section of No. 1 engine was turning brown from excessive heat. The fire extinguishers were used with little effect, and then a severe engine fire in No. 1 engine was observed. While No. 1 engine was being feathered, the manifold pressure on No. 2 engine decreased to approximately 20". The airplane went out of control, spun to the left, and crashed. An investigation on the ground, after the crash, revealed that No. 1 and No. 4 propellers were feathered.

2. Findings:

a. T.O. 01-20EJ-177, dated 1 May 47, was partially complied with in that the exhaust manifold has been installed but the heat shields [p.2]* were not installed at the rear lower cowl assembly. (AAF Form No. 60A, Remarks: "19 June '47 - Wright Field - TSFMB - T.O. 01-20EJ-177 partially c/w. Exhaust manifold installed. Shields not installed. /s/ R. H. Melody."

b. Clamp Assy, Part No. CL04005, a part of the exhaust rear manifold assembly, was cracked as indicated in the inclosed photo. This clamp assembly attaches the flexible joint assembly, Part No. CL04003 of the Exhaust Rear Manifold assy to Section Assy, Part No. A12202, on the inboard side of No. 1 engine.

c. A visual inspection of No. 1 engine revealed that the fire had started in the area of the inboard exhaust rear manifold assembly and then entered the accessory section and seriously burned the upper right inboard side of the accessory section. Molten metal was found on supercharger hood of inboard supercharger on No. 1 engine. The screwjack Assembly Coil Flap, Part No. 555A,

[* The following stamps and marginalia are found on page 2 of the original document:]

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that was located immediately above the rear exhaust manifold showed more indications of fire damage than any other part of the engine.

3. Conclusions:

a. The fire in No. 1 engine started in the vicinity of the inboard rear exhaust manifold assembly. The fire appears to have started in the area surrounding the Flexible Joint Assembly, Part No. CL04003, progressed into the accessory section because of the absence of the heat shields as required by T.O. 01-20EJ-177, and then continued to spread in the upper inboard side of the accessory section.

b. Although Clamp Assy., Part No. CL04005 was found cracked, it was impossible to determine whether this break occurred in flight or as a result of the crash. (Report by Wright Field Lab.) If this break occurred during flight, allowing the flexible joint assy, Part No. CL04005, to become disengaged, exhaust fire could have entered the accessory section because of the absence of the heat shield required by T.O. 01-20EJ-177, and would have been the source of this engine fire.

c. T.O. 01-20EJ-177 was not completely complied with as indicated in the "Findings". Paragraph 2b, subject T.O. states: "a heat shield will be installed at the rear lower cowl assembly prior to installation of the rear exhaust collector ring, to prevent [p.3]* excessive heat from entering the rear of the engine." The failure to comply with T.O. 01-20EJ-177 results in a very serious fire hazard prevailing in all engines. The exhaust stack from the front exhaust collector ring passes underneath and to the side of the accessory section. Without the heat shields installed, there is nothing to protect the accessory section from the intense

[* The following stamps and marginalia are found on page 3 of the original document:]

heat of this exhaust stack. The fuel injection pump is located in the accessory section over and above this exposed area of the exhaust. Any gasoline leaks from this fuel injection pump would cause fuel or fuel fumes to come in contact with the heat of the exhaust and start an engine fire.

d. No. 4 engine was found feathered when inspected on the ground after the crash. It is believed that this engine feathered as a result of the airplane Commander inadvertently pressing No. 4 feathering switch. The co-pilot disengaged the feathering switch for No. 4 engine, but did not visually check the condition of this engine because his attention was being concentrated on the fire in No. 1 engine.

e. No definite explanation can be made for the drop in manifold pressure in No. 1 engine. Any break in the exhaust system would have resulted in a partial loss of manifold pressure but it is doubted whether any noticeable loss of manifold pressure would have been caused. The condition of the engine, after the crash, precluded any further internal analysis.

f. No definite reason could be determined that would cause the manifold pressure on No. 2 engine to decrease. A possible explanation is that the engineer accidentally shut the fuel off on No. 2 engine when he was going through his procedure for feathering No. 1 engine.

3. Recommendations:

a. Since it appears that the failure to completely comply with T.O. 01-20EJ-177 is the most possible cause factor for this accident, it is recommended that definite

67a

instructions be issued that will require complete compliance with this T.O. and eliminate any possibility of heat shields being omitted when this Technical Order is complied with.

/s/ H. A. MOODY

H. A. MOODY
Colonel, USAF
President, Aircraft Accident
Investigation Board

2 Incls:

Incl. 1. - Photo

Incl. 2. - 1st Ind. with B/L

[p.4]*

B/L fr President, Acft Accident Investigation Board, to CG, WRAMA, RAFB, Robins Fld, Ga. Subj: "Supplemental Acft Accident Report, TB-29 Serial No. 45-21866.

1st Ind

Dec. 17, 1948

HEADQUARTERS, WRAMA, RAFB, Robins Field, Georgia

TO: Inspector General, First Region, Flying Safety Division, Langley Air Force Base, Hampton, Virginia.

1. Report has been reviewed and is concurred in as being the best possible explanation for this accident.

2. Action has been taken to insure the complete compliance with T. O. 01-20EJ-177 on all B-29 aircraft assigned to this Station, including Base assigned aircraft and aircraft assigned to be worked by the Maintenance Directorate.

/s/ R. V. IGNICO

R. V. IGNICO
Colonel, USAF
Commanding

2 Incls:
n/o

cc: CG, AMC

3150th Electronics Sq. WRAMA

[* The following stamps and marginalia are found on page 4 of the original document:]

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