

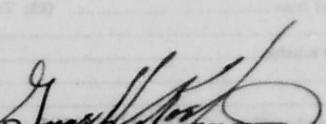
DESCRIPTION OF ACCIDENT

(Brief narrative of accident. Include statement of responsibility and recommendations for action to prevent repetition)

The landing gear was retracted on the ground due to incorrect wiring while complying with TMI 01-20EF-36 dated 27 October, 1944. S/Sgt. Renshaw was wiring his first aircraft. The instructions in TMI 01-20EF-36 specifically states that the lead from the bus bar at Station Four (4) would be connected to the right hand side of the limit switch. The right terminal, however, was broken off and after several attempts to repair the terminal S/Sgt. Renshaw checked the drawing that accompanies the above TMI and decided the same effect would be gained by connecting the above mentioned lead to the left terminal on the limit switch. The drawing does indicate that the two (2) terminals are on a closed circuit. Without checking with the Squadron Technical, Line Chief, Engineering Officer, or further investigating the aircraft blueprints covering the installations in question, he connected the lead in question to the left terminal on the limit switch. When the battery and master switches were turned on to check the operation of the hydraulic pump the landing gear retraction motors also began to function. Before this was realized the landing gear had retracted too far to be stopped by cutting the switch. The aircraft fell to the hardstand. The impact resulted in extensive damage. The aircraft is suitable for salvage only.

S/Sgt. Renshaw is charged with 50% of the responsibility in that he was careless and displayed poor judgment. He should have realized that there was some mistake in the TMI drawing when the TMI instructions were so explicit about wiring the lead to the unused terminal on the switch. He also should have consulted his superior before deviating from the plan. This is especially true when so much was at stake. The Squadron Engineering Officer, Captain Nowosad, and the Line Chief, M/Sgt. Herman L. Efland, are each charged with 25% of the responsibility in that they failed to impress S/Sgt. Renshaw with the fact that it was not his prerogative to deviate from the instructions as set forth in the TMI.

This matter has been referred to the Squadron C.O. for any punitive and corrective action deemed necessary.

Signature 
GEORGE H. KOEPEK, JR., Major, AC

Signature 
THOMAS D. HUTCHINSON, Major, AC

Signature 
ARTHUR E. BEAN, Major, AC

Date 1 December, 1944

12.18.44

U. S. ARMY AIR FORCES
REPORT OF AIRCRAFT ACCIDENT

(1) Place AAF Station 106 (2) Date 21 November 1944 (3) Time 1015
 AIRCRAFT: (4) Type and model B-17G (5) A. F. No. 42-102566 (6) Station 106
 Organization: (7) 8th (8) 38th Bomb (H) (v) 545th Bomb (H)
 (Command and Air Force) (Group) (Squadron)

PERSONNEL.

PILOT CHARGED WITH ACCIDENT

(20) Nowosad (Last name) (21) 0-856513 (22) Captain (23) 18 (24) AC (Branch)
(20) Frederick (First name) (21) (Serial number) (22) (Rank) (23) (Personnel class) (24) (Branch)
(20) (NMI) (Middle initial) (21) (22) (23) (24)

Assigned (25) 8th (26) 384th Bomb (27) 545th Bomb (H) (28) 106
(Command and Air Force) (Group) (Squadron) (Station)

Attached for flying (29) (30) (31) (32)
(Command and Air Force) (Group) (Squadron) (Station)

Original rating (33) (34) Present rating (35) (36) Instrument rating (37)
(Rating) (Date) (Rating) (Date) (Date)

FIRST PILOT HOURS:

(at the time of this accident)

(38) This type..... (42) Instrument time last 6 months.....

(39) This model..... (43) Instrument time last 30 days.....

(40) Last 90 days..... (44) Night time last 6 months.....

(41) Total (45) Night time last 30 days.

AIRCRAFT DAMAGE

| DAMAGE | | | (49) LIST OF DAMAGED PARTS |
|------------------------|--|--|----------------------------|
| (46) Aircraft..... | | | |
| (47) Engine(s)..... | | | |
| (48) Propeller(s)..... | | | |

(59) Weather at the time of accident

(51) Was the pilot flying on instruments at the time of accident

(52) Cleared from _____ (53) To _____ (54) Kind of clearance _____

(55) Pilot's mission

(56) Nature of accident

(57) Cause of accident

12-18-44

WAR DEPARTMENT
U. S. ARMY AIR FORCES
REPORT OF AIRCRAFT ACCIDENT

(1) Place AAF Station 106 (2) Date 21 November 1944 (3) Time 1015
 AIRCRAFT: (4) Type and model B-17G (5) A. F. No. 42-102566 (6) Station 106
 Organization: (7) 8th (8) 384th Bomb (H) (9) 545th Bomb (H)
 (Command and Air Force) (Group) (Squadron)

PERSONNEL

PILOT CHARGED WITH ACCIDENT

(20) Efland (Last name) (21) 11028811 (22) M/Sgt. (23) 38 (24) AC (Branch)
(25) Herman (First name) (26) L (Middle initial) (27) Serial number (28) Rank (29) Personnel class (30) AC (Branch)

Assigned (25) 8th (26) 38th Bomb (27) 545th Bomb (H) (28) 106
(Command and Air Force) (Group) (Squadron) (Station)

Attached for flying (29) (30) (31) (32)
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Original rating (33) (34) Present rating (35) (36) Instrument rating (37)
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(at the time of this accident)

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(39) This model..... (43) Instrument time last 30 days.....
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(59) Weather at the time of accident

(51) Was the pilot flying on instruments at the time of accident.

(52) Cleared from _____ (53) To _____ (54) Kind of clearance _____

(55) Pilot's mission

(58) Nature of accident.

(57) Cause of accident

STATEMENT

Landing gear modification was connected to upper landing gear limit switch to used terminals. The blueprint modifications show a double contact, single throw switch. In checking the hydraulic system the landing gears collapsed. With reference to the drawing in Technical Maintenance Instruction No. 01-20EF-36, 27 October, 1944, to show two switches in limit switch box, the line should be a dotted line instead of a solid line. I understood that the wires going to the switch could be connected to either terminal. The screw was missing on one side of the switch and I attempted to solder it but the terminal wouldn't hold. I thought that it could be connected to either terminal because of the drawing referred to in the modification.

Charles V Renshaw
S/SGT. CHARLES V. RENSHAW,
A.S.N. 37368142, 545th Bomb Sqdn.

RESTRICTED

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HEADQUARTERS
AAF STATION NO. 106
Office of the Group Engineering Officer

(F-P-2)

APO 557,
23 November, 1944.

SUBJECT: Opinion on Aircraft Accident B-17G 42-102566.

TO : Aircraft Accident Officer, AAF Station No. 106, APO 557.

1. The landing gear was retracted on the ground due to incorrect wiring in compliance with T.M.I. 01-20EF-36.

2. S/Sgt. RENSHAW was wiring his first aircraft in compliance with above T.M.I. He wired from the bus bar to the terminal of "UP" Circuit switch in the regular landing gear circuit instead of the two unused terminal posts of the limit switch.

3. This resulted in all three landing gears being retracted when the batteries and main line switches were turned on to check hydraulic pump operation.

4. S/Sgt. RENSHAW was in error in that he misunderstood the drawing in the T.M.I. and connected the wire to the wrong terminal in the upper limit switch.

5. Since this aircraft was the first in this Squadron to be modified as instructed in T.M.I. 01-20EF-36. Carelessness was involved more so by the Squadron Engineering Officer and other Engineering heads than S/Sgt. RENSHAW. Lack of mental alertness and inattention caused the accident.

John M. Palmer
JOHN M. PALMER,
Captain, Air Corps,
Group Engineering Officer.

CONCURRED BY:

N. Hansen
N. HANSEN,
Captain, Air Corps,
Station S-4 Officer.

RESTRICTED

FIVE FORTY FIFTH BOMBARDMENT SQUADRON (H)
ARMY AIR FORCE STATION 106
Office of the Engineering Officer

F-N-2

APO 557,
22 November, 1944.

SUBJECT: Statement by Engineering Officer Concerning Accident Resulting in Salvage of Ship 42-102566.

TO : Group Operations Officer, 384th Bomb Group (H), AAF Station 106, APO 557.

My electrician, S/Sgt. Renshaw, had just completed the modification required by TMI 01-20EF-36 dated 27 October, 1944. This TMI involves the hydraulic and landing gear electrical circuits. Then the modification was completed to the best of his knowledge, the batteries were turned on. The landing gear and tail wheel were retracted and the airplane collapsed.

In doing this modification, according to TMI 01-20-EF-36 wiring diagram, a lead goes from LXX on the bus bar at Station 4 to the right hand side of the limit switch. But in doing this, the screw on the switch was broken and after failing in other ways to secure the wire to this connection, he decided to connect it to the left hand side of the switch where R 105 wire is connected. S/Sgt. Renshaw figured the circuit was a closed one on either connection according to the wire diagram in this TMI and a connection to either point would be satisfactory. The switch according to him should have been a dotted line connecting the two ends instead to a solid one. This is what confused him.

By connecting the lead to the side where wire 105 is, he completely neglected the landing switch and the upper limit switch. Therefore when the power was turned on, the landing gear immediately retracted. Before he could get the power off, the airplane fell completely.

On these modifications, the specialists always consult the Engineering Officer as to any change they are anticipating. In this case he was not consulted. Therefore in the future, the modification will be explained as it has always been. In addition to this, warnings will be issued as to any faulty connections that may occur and the Engineering Officer will be consulted at all times before any action has been taken.

RERICTED

Frederick Nowosad
FREDERICK NOWOSAD,
Capt, Air Corps,
Engineering Officer.

FIVE FORTY FIFTH BOMBARDMENT SQUADRON (H)
ARMY AIR FORCE STATION 106
Office of the Engineering Officer

F-N-2

APO 557,
22 November, 1944.

SUBJECT: Statement by Line Chief Concerning Accident Resulting in Salvage of Ship 42-102566.

TO : Group Operations Officer, 384th Bomb Group (H), AAF Station 106, APO 557.

S/Sgt Renshaw had completed a modification on B-17G Airplane, serial no. 42-102566 as directed by T.M.I. 01-20EF-36, dated 27 October, 1944, "Installation of B-14 Switch for Electric Motor Driven Hydraulic Pump". Upon completion of modification, he turned the batteries on. Immediately, upon throwing the master switch, the hydraulic pump began to run. The landing gear also started retracting but he failed to realize it as he thought the hydraulic pump was overworking itself. He immediately had the switch cut off but the landing gear collapsed leaving aircraft in such a condition that it could only be salvaged.

S/Sgt Renshaw had hooked B-14 Switch on left hand side of the switch. This position is where R 105, which is the hot lead to the landing gear retracting solenoid, connects. Upon turning on the master switch, this would immediately cause the landing gear to retract.

S/Sgt Renshaw had started to hook the lead from the buse bar, which is required for this modification, to the rear left hand post of the switch. However, as the screw was missing and since he couldn't very well solder the lead, he looked at the diagram again and since the wiring diagram didn't have a dotted line between the two sides of the switch, decided that this was a continuation of the circuit from the right side to the left side of this switch. The diagram showed a solid line which gave him this indication. He decided it was alright to connect it on the rear terminal on the right hand side as well as the left hand. Actually this was wrong.


HERMAN L. ELLARD,
M/Sgt,
Line Chief.

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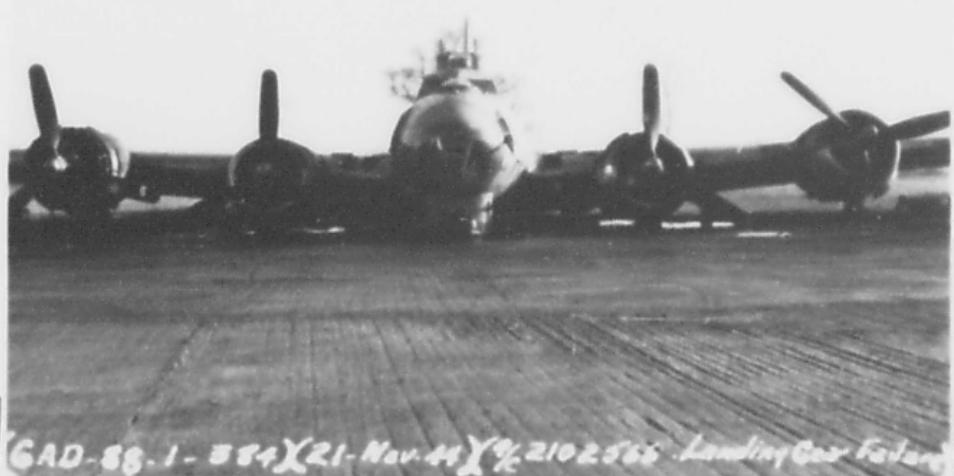
(GAD-88-1-384) (21-Nov-44) (7-2102566) Landing Gear Failure



(GAD-88-2-384) (21-Nov-44) (7-2102566) Landing Gear Failure



(GAD-88-3-384) (21-Nov-44) (7-2102566) Landing Gear Failure





(GAD-88-1-384) (21-Nov-44) 2102566. Landing Gear Failure



(GAD-88-2-384) (21-Nov-44) 2102566. Landing Gear Failure



(GAD-88-3-384) (21-Nov-44) 2102566. Landing Gear Failure

