4-4-41

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AAF Form No. 14 — WAR DEPARTMENT — U. S. ARMY AIR FORCES — REPORT OF AIRCRAFT ACCIDENT — Accident No. 43-11-16-510

(4185) 19015

(1) Place San Giovanni, Italy (2) DATE 16 November 1944 (3) TIME 0800

Aircraft: (4) Type and Model B-24J (5) A.F. No. 42-51873 (6) Station APO 520, U.S. Army

Organization: (7) 15th Command & AF (8) 455th Bomb Group (9) 740th Bomb Squadron

15 BH 4185

PERSONNEL

(10) Duty	(11) Name Last name first	(11) AF Com.	(12) Rating	(13) Ser No.	(14) Rank	(15) Pers Class	(16) Branch	(18) Result to Personnel	(19) Use of Para.
P	Hellreck, Richard H.	15th	P	O-822704	2nd Lt	18	AC	None	No
CP	Stokem, Frederick M.	15th	CP	O-824982	2nd Lt	18	AC	None	No
B	Riley, Lewis A.	15th	B	T-126443	F/O	17	AC	None	No
N	Hesterman, Kenneth F.	15th	N	O-2060518	2nd Lt	18	AC	None	No
E	Lucas, George L.	15th	E	18046503	T/Sgt	20	AC	None	No
R	Caufield, John J.	15th	R	32938542	S/Sgt	21	AC	None	No
G	Engle, Robert E.	15th	G	35231475	Sgt	21	AC	None	No
G	Cleveland, Robert W.	15th	G	37702485	Sgt	21	AC	None	No
G	Post, Fred M.	15th	G	38437366	S/Sgt	21	AC	None	No
F	Rohrer, Carl E.	15th	F	15060389	S/Sgt	20	AC	None	No

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

(20) Hellreck, Richard H. (21) O-822704 (22) 2nd Lt (23) 18 (24) AC
(Last name) (First) (Mid Init) (Ser No.) (Rank) (Pers C.) (Branch)

Assigned (25) 15th (26) 455th Bomb (27) 740th Bomb (28) APO 520, U.S. Army
(Command and AF) (Group) (Squadron) (Station)

Attached for flying (29) ____ (30) ____ (31) ____ (32) ____
(Command & AF) (Group) (Squadron) (Station)

Original rating (33) Pilot (34) 3/12/44 Present rating (35) ~~Pilot~~ (36) ~~Current~~ rating ____
(Rating) (Date) (Rating) (Date) (37) (Date)

First Pilot Hours:
(at the time for this accident)

(38) This Type	165:25	(42) Last time last 6 months	
(39) This model	100:55	(43) Last time last 30 days	
(40) Last 90 days	67:00	(44) Night time last 6 months	
(41) Total	~~169:00~~	(45) Night time last 30 days	

AIRCRAFT DAMAGE

	DAMAGE					(49) LIST OF DAMAGED PARTS
(46) Aircraft	M	S			W	See Inclosure
(47) Engine(s)			O	W	W	
(48) Propeller(s)			W	W	W	

(50) Weather at the time of accident CAVU

(51) Was the pilot flying on instruments at the time of accident No

(52) Cleared from San Giovanni (53) To Secret (54) Kind of clearance Combat

(55) Pilot's mission Combat

(56) Nature of accident Main landing gear collapsed while taxiing. Group III.

(57) Cause of accident Mechanical failure of landing gear system

Incl. #1

RESTRICTED

DESCRIPTION OF ACCIDENT

(Brief narrative of accident, including statement of responsibility and recommendations for action to prevent repetition)

The engines were started in the hardstand with the landing gear handle in the down position. As soon as pressure was built up in the free-flow system the landing gear selector valve kicked to the neutral position but in so doing passed neutral momentarily due to high kick-out pressure or some other malfunction of the selector valve. Had the safety solenoid been extended this obviously could not have happened, but as it was a sufficient surge of pressure was built up in the retract side of the actuating cylinder to break the lock. As a result when the airplane was taxied out onto the taxi strip the gear completely collapsed. I am positive the gear handle was not manually placed in the up position; therefore it is a case of 100% mechanical failure.

It is recommended that unless maintenance work has been performed on the system, the practice of putting the gear handle in the down position after parking be discontinued.

6 Incls:
Incl 1 - Form 54 Unsatisfactory Report.
Incl 2 - Form 205 Medical Officer's Report of Aircraft Accident.
Incl 3 - Sub. Ltr "Damaged Parts on Airplane B24J, 42-51873.
Incl 4 - 6 Certificates on Accident.

Signature David W. Harp, Jr.
DAVID W. HARP, Jr., Lt Col, A.C.
(Investigating Officer)

Date 20 November 1944

740TH BOMBARDMENT SQUADRON (H) AAF
Office of the Operations Officer

16 November 1944

C E R T I F I C A T E

I started engines with gear handle in down position, gear handle came to neutral after No. three (3) engine started. Gear had bee n preflighted by both crew chief a nd engineer. Ran flaps throug h full and back to zero. Taxied from h ard stand, made one turn to right following taxi strip. Approximately three hundred (300) feet past hard stand and one hundred (100) feet past the turn, the right landing gear collapsed. All switches were cut off. The taxiing speed was abo ut eight (8) M.P.H., at no time had the gear handle been placed in the up position. The left main gear was still locked but the right was unlocked allowing it to collapse.

Richard H. Hollrock

RICHARD H. HOLLROCK,
2nd Lt., Air Corps,
Pilot.

Encl 4

RESTRICTED

HEADQUARTERS 455TH BOMBARDMENT GROUP (H) AAF F-SNT-1
Office of the Engineering Officer
APO 520 US Army

22 November 1944

To Whom It May Concern.

Investigation of the landing gear and landing gear actuateing system on B-24J, Number 42-51875, to determine the cause of the collapse of the right hand main landing gear on subject Aircraft on November 16, 1944, revealed that the landing gear safety lock solenoid, part number GK 32E-5021, was jammed in the unlocked position. There were no other damaged or malfunctioning parts on the landing gear or in the actuateing system.

The condition noted above made it possible for the landing gear lever to be moved to the up position while on the ground, which is normally not possible. It is conceiveable that this could have occurred accidentally during runup or taxiing without the crew of the ship being aware of the mishap .

Sargent N. Tower

SARGENT N. TOWER
Captain, Air Corps,
Group Engineering.

Incl 2

740TH BOMBARDMENT SQUADRON (H) AAF
Office of the Engineering Officer

23 November 1944

C E R T I F I C A T E

On the morning of the 16th November 1944, airplane No. 42-51873, taxied from its hard-stand, making a turn to the left onto the taxi strip, then moved a short distance to a right turn and traveling approximately fifty feet (50), the right main landing gear began to collapse, allowing the airplane to settle onto the belly of the fuselage and right wing tip, resulting in severe damage to the plane. The pilot was taxing aircraft at a very reasonable speed and manner. After the plane was lifted back onto the gear, it was checked and all clearances were found to be within tolerance. However after aircraft was moved to the 558th Service Squadron, the landing gear safety solenoid was found to be stuck in the retracted position, With the solenoid in this position it is impossible for the landing gear selector handle to be placed in the "up" position, could have contributed to the accident.

An unsatisfactory report is being submitted on the defected landing gear safety solenoid.

George L. Ringstad
GEORGE L. RINGSTAD,
Capt., Air Corps,
Engineering Officer

Incl 2

R E S T R I C T E D

OFFICE OF THE ENGINEERING OFFICER
558 AIR SERVICE SQUADRON
APO 520

24 November 1944.

SUBJECT: Damaged parts on airplane B24J, No. 42-51873

TO : All Concerned

1. The following items were damaged in the accident involving airplane B24J, No. 42-51873.

QUANITY	UNIT	NOMENCLATURE	PART NO.
2	ea.	Propellor Assy, Hamilton Hydromatic, dia. 11'7"	23E50-505
1	ea.	Engine Assy., P & W	R1830-65A
1	ea.	Rudder, tab, & cover Assy. R.H.	32T10115-R
1	ea.	Stabilizer Assy., Vertical	32T8050-0
1	ea.	Door Assy., R.H., rear bomb	32B046-5R
1	ea.	Door Assy., R.H., front bomb	32B046-4R
1	ea.	Casing, 36"	165500
1	ea.	Tube, dual seal, inner, 36"	811100
1	ea.	Turret, ball, Sperry	963110
1	ea.	Bulkhead Assy., sta. 6.0	32B2060-6
1	ea.	Rack Assy., R.H., rear bomb	32F3642-5
1	ea.	Bulkhead, Bomb Bay, R.H., sta. 5.0	32B1750-0R
1	ea.	Longeron Assy., Bomb Bay, sta. 5.0 to sta. 6.0	32B9014-0
1	ea.	Support Assy., Bottom Turret, sta. 6.1 to sta. 7.0	32B1063-0
1	ea.	Longeron Assy., sta. 6.0 to sta. 7.0	32B1107-0L
1	ea.	Longeron Assy., sta. 6.0 to sta. 7.0	32B1107-0R
1	ea.	Track, bomb door, sta. 6.0	32B2060-23L
1	ea.	Track, bomb door, sta. 6.0	32B2060-23R

Ernest J. Thompson
ERNEST J. THOMPSON,
1st Lt., Air Corps,
Ass't Engineering Officer

Incl 5

R E S T R I C T E D

WAR DEPARTMENT
AAF Form No. 54
(Revised 2-18-43)

~~RESTRICTED~~

~~WAR DEPARTMENT~~

ARMY AIR FORCES

UNSATISFACTORY REPORT

(See AAF Reg. 15-54 for Information on Proper Use of this Form)

TO BE FILLED IN BY STATION		LEAVE BLANK		
STATION SERIAL No.	DATE SUBMITTED	A. S. C. SERIAL No.	REFER TO	CLASS
	29-11-44			

STATION		ORGANIZATION	
		746TH BOMBARDMENT SQUADRON (H)	
SUBJECT OF REPORT	Property Class—Item APC 320 01-B SOLENOID ASSEMBLY	Manufacturer CANNON ELECT. DEV. CO.	AAF Order or Shipping No.
AIRCRAFT—Model & AAF Serial No. B-24J #42-51873	ENGINE—Model & AAF Serial No.	UNIT OR ACCESSORY—Type, Model and Serial No.	
AIRCRAFT REPORTS ONLY	LAST D. I. R.—Depot	Date	Flying Time Since / Total Flying Time
ENGINE REPORTS ONLY	LAST OVERHAUL—Depot / Hours Since	Depots and Hours At Each Previous Overhaul	

PART	Name	Part Drawing, Serial and Specification No.			
	LANDING GEAR SOLENOID ASSY	CANNON #1799 - OCNB - ~~#3855-C1~~			
	Time in Use / Quantity on Hand / Quantity Known Defective	No. Previous Failures	Manufacturer / Contractor	Name or Identification	
	241:00 HRS. NONE NONE	NONE	ELEC. DEV.		

Indicate by "X" Disposition of Exhibit	Photographed and Prints Enclosed	Held for Instructions	Sent Under Separate Cover	Sent In Attached Package	Repaired and Returned to Service	Disposed of (Explain Below.)	To Overhaul Facility (INITIALS)
➡	☐	☐	☐	☐	☐	X	☐

GIVE COMPLETE DETAILS, PROBABLE CAUSES AND RECOMMENDATIONS BELOW:
(Use Only Applicable Spaces Above—Avoid Unnecessary Repetition)

EXPEDITE

1. WHILE TAXIING PRIOR TO TAKE OFF, RIGHT MAIN GEAR OF B-24J #42-51873 CAME UNLOCKED CAUSING GEAR TO RETRACT. AIRPLANE WAS RIGHTED AND GEAR LOCKED SATISFACTORILY. ALL CLEARANCES WERE CHECKED AND FOUND WITHIN TOLERANCE. A GROUND RETRACTION TEST PROVED GEAR AND HYDRAULIC SYSTEM TO BE IN WORKING ORDER. HOWEVER, LANDING GEAR SOLENOID SAFETY SWITCH WAS FOUND TO BE STUCK IN THE "IN" POSITION WHICH WOULD ALLOW THE LANDING GEAR SELECTOR HANDLE TO BE MOVED TO THE "UP" POSITION WHILE AIRPLANE WAS ON GROUND. WHETHER OR NOT THE LANDING GEAR LEVER WAS MOVED ACCIDENTALLY CAN NOT BE PROVEN.

2. INSPECTION OF THE SOLENOID ASSY UPON REMOVAL SHOWED THE PLUNGER TO BE BADLY SCORCHED. SCORCHING WAS SO SERIOUS AS TO DEPOSIT A HEAVY FILM ON PLUNGER, CAUSING IT TO STICK TO THE BUSHING WITHIN THE SOLENOID. CONTINUITY TEST OF THE SOLENOID PROVED THE CORE TO BE IN A SATISFACTORY CONDITION. THE CAUSE OF THE SCORCHED APPEARANCE COULD NOT BE DETERMINED. THE POSSIBILITY OF HYDRAULIC FLUID OR OIL BURNING ON THE SOLENOID PLUNGER MAY BE ELIMINATED AS THE AREA IMMEDIATELY AROUND IT WAS CLEAN AND FREE OF SAME.

3. SOLENOID ASSY SENT TO 558TH SERVICE SQUADRON FOR DISPOSITION.

4. THIS IS THE FIRST UNSATISFACTORY REPORT ON THIS CONDITION SUBMITTED BY THIS ORGANIZATION.

George L. Ringstad
GEORGE L. RINGSTAD,
CAPTAIN, AIR CORPS,
ENGINEERING OFFICER.

~~RESTRICTED~~

Ind 1 ROUTING SEND ORIGINAL AND TWO COPIES DIRECT TO COMMANDING GENERAL, HQ. AIR SERVICE COMMAND, PATTERSON FIELD, FAIRFIELD, OHIO.

☆ U. S. GOVERNMENT PRINTING OFFICE : 1943 16—84819-1

HEADQUARTERS 455TH BOMBARDMENT GROUP (H) AAF H-VJD-1
Office of the Technical Inspector
APO 520 US ARMY

29 November 1944.

SUBJECT: Aircraft Accident Report, AAF Form No. 14.

TO : Chief Flying Safety, AAF
Winston Salem, N. C.

1. In compliance with Fifteenth Air Force Memorandum 120-5, dated 9 July 1944, enclosed find AAF Form No. 14 with allied papers, on an Aircraft Accident which occured at this Field.

For the Group Commander:

Vincent J. Damiano

VINCENT J. DAMIANO,
2nd Lt., Air Corps,
Gp Tech. Inspector.

7 Incl:

Incl 1 - Rept. of Acft. Accident AAF Form 14.
Incl 2 - Ltr., Gp. Engineering Officer.
Incl 3 - Certificate - Sq. Eng. Officer.
Incl 4 - Certificate - Pilot of Acft.
Incl 5 - Ltr. 558th Serv. Sq. - Damaged Parts.
Incl 6 - Med. Off. Rept. of Acft. Accident.
Incl 7 - Unsatisfactory Report.