AIRCRAFT ACCIDENT
IDENTIFICATION
NO.

701 27 102

RECORDS CODE SHEET
SND 4535 (Rev. 1-65)

NAVAL AVIATION SAFETY CENTER

GENERAL (Card No. 1)			SUPPLEMENTARY (Card No. 2)		
Bureau Number	139728	16-21	Weather		16-21
Reporting Custodian	166	22-24	Kind of Flight	1 1	22-24
Type Duty	J	25	Relative Wind - Direction		25
Major Command	1	26	Relative Wind - Velocity		26
Aircraft Damage	A	27	Special Attention		27
Aircraft Injury	A	28	Clearance	2	28
Time of Day	2	29	Maneuver prior to Occurrence		29
Carrier Hull Number	—	30	Number of other Aircraft		30
First Accident type	F1	31-32	Primary Causal Factor	P	31-32
First Accident phase	4A	33-35	Altitude of Occurrence or Emergency	0 2 0	33-35
Second Accident type	B1	36-37			
Second Accident phase	51	38-40	Environmental Factors		38-40
Type of Operation	3	41-42			
Contributing Cause Factors	321JQ	43-47	Non-Navy Injury ("R")	1	42
Pilot Factor, First	XT	48-49	Number of "A" or "U" Injury	0 1	43-44
Pilot Factor, Second		50-51	Number of "B" Injury 1-civ	0 2	46-47
Pilot Factor, Third		52-53	Number of "C" Injury		48-49
First other Personnel Factor	D7	54-55	Number of "D" Injury		50-51
Second other Personnel Factor	~~C2~~	56-57	Number of "E" Injury		52-53
Primary Major Material Factor	A	58	Number of "F" Injury civ	0 3	54-55
Secondary Major Material Factor		59	Number of "G" Injury		56-57
Design		60	Location	A1LEMRE	62-68
Facilities	V	61			
Special Data & Cond.	1GBK	62-65			
Special Data & Cond./~~Type of Incident~~		66			
Primary Cause	3	67			
1st Posit. of Pri. Causal Factor	P	68			
1st Possible Cause & Causal Factor	2C2	69-71			
2nd Possible Cause & Causal Factor		72-74			
No Personnel Card ("R")		80			

ACCIDENT DAMAGE A (9)

ACCIDENT INJURY A (10)

FISCAL YEAR 7 (75)

Don't Count		Enemy Action		Other Aircraft		
I. D. NO.	7	0 1	2	7 1	0	2
	YR	MO	DAY	TYP	SEQ	
			-	A	7	A
			Model			

Model Code 31 (76 77)

PERSONNEL STATISTICS
(Card No. 3)

File Number → (b) (6) [redacted]

Name	16	17	18	19	20	21	Rank Rate	Br Service	Age	Yrs Experience	Status	Position	Inj to Ind	Abandon A/C	Pilot Factor Involved	Trainer Utilization	Instr. Card	Total Time All Models	All Models 3 Months	All Series This Model	All Ser Mod 3 Months	CV Landings	Instrument Hours	Nite Hours	Total Time Jet or Helo
03 ZAMBORI					D	P	4	2	9	3	A	1	A	1	1	0 0	3	1 6	0 1	9 9	0 1	3	0 1	0 1	—
22 23 24 25	26	27	28	29	30	31	32	35	37	40	42	45	47	49	51	52-53	55	56-57	58-59	62-63	65-66	68	69-70	71-72	73-74
04 (b) (6) [redacted]							F	1	—		S	A	B												

Name 16 17 18 19 20 21

File Number → (b) (6) [redacted]

IBM PERSONNEL CODED ON REVERSE SIDE ☒

CLOSED
18 MAY 1967

CODED ___ REVIEWED ___ LOGGED H PUNCHED P VERIFIED M

5-3-67

CODE SHEET REVIEWED BY CLASS DESK ANALYST JBL (Initials) 31 MAR 1967 (Date)

43

SND 4515 (Rev. 7-65) (Back)

OTHER INJURED PERSONNEL

(Modified Card No. 1)

C.C. 79-80	FILE NUMBER	NAME	Rank or Rate	E.R. Service	Age	Yrs. Exper.	Status	Position	Inj. to End	Abandon A/C
	16 17 18 19 20 21	22 23 24 25 26 27 28 29 30 31	32	35	37	40	42	45	47	49
05		(b) (6) [redacted]	J	J			S	A	F	
06			J	J			S	A	F	
07			J	J			S	A	F	
08			J	J			S	A	F	
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
19										
19										
19										
19										
19										

IBM: Place an "X" overpunch in CC80 if these cards are coded.

ZAMBORI

I.D. Number	GCI	Model	FY	Model Code
70127102	00	-A1H	7	31

TA	TM	Equipment	Equipment	Equipment	Equipment	Equipment	Equipment	Equipment	Equipment	INJ	No. of Cds.		CZ	Seq. of Ind.	
B	F	F D	E B	A 0	E A	J 0	N 0	S 0	L 0	A	1	1		0	V

CARD 65

TA	TM									INJ	No. of Cds.		CZ	Seq. of Ind.	

CARD 65A

TA	TM									INJ	No. of Cds		CZ	Seq. of Ind.	

CARD 65B

Type Aircraft	Type Mishap	Top. at Scene	Egress	Ejt. Info	Egress Prob. Prior	Egress Prob. During	Egress Prob. After	Type Seat	Firing Method	Seat Pos.	A/C Attit.	Ejt. Alt.	Air-Speed	Weight	Chute Op. Alt.	In Crash Area	Time in Water	Time in Raft			Vertebral	Fractures	Est. Fat. Cause	Injury	Combat Zone	Seq. of Ind.	
B	F		A	N																				A		0	1

15 NOV 1967

CARD 66

ZAMBORI

I. D. Number	GCI	MODEL	FY	MODEL CODE
7012702	00	-AIH	7	31

TYPE A/C	TYPE MIS	WIND VEL	WAVE HEIGHT	WAVE INTERVAL	VISIBILITY	AIR TEMP	WATER TEMP		ALERT FACTOR	LOC. SITE	SURV. LEFT	LOC. SURV.	SURV. FAC.	FATALS (NO RESCUE)		TRG. DATE	TRG. DATE	TRG. FACTOR		NO E/R	INJURY		SEQ OF IND.
16 17	18	19 20	21	22	23 24	25 26	27 28	29	30 31	32	33	34 35	36 37	38 39	40 41	42 43	44 45	46 47	48 49	50 51	52 53	54 55	56 57	58 59	60 61	62 63	64 65	66 67	68 69	70	71	72	73 74
B	F	0	3		2	6	4		B	E	A		A	D	R			D	P	D	P				A			0	1

CARD 67

TIME OF DAY MISHAP	DEPART	LOCATE	ACC/ASAN.	LOC. DUTY RES. VEH.	RESCUE VEHICLE MODEL AND TYPE	NO TO BE RESCUED	NO RESCUED	BACK UP RES. VEH.	WATER TEMP	AIR TEMP	SEA COND	WEATHER	WIND VEL.	RESCUE EQUIPMENT USED	TRG OF RES. TEAMS	COM. TECH AND EQUIP	RETRV. TECH AND EQUIP	RES TEAM WORK	TYPE AIRCRAFT	TYPE MISHAP	TOPOGRAPHY	DISTANCE	TIME MIS. TO ALERT	ALERT PROB.	METHOD OF ALERT	TIME DEPART	DEP DELAY	INJURY		SEQ OF IND
16 17	18	19	20	21	22 23 24	25 26	27 28	29	30	31	32 33	34 35	36 37	38 39	40 41	42 43	44 45	46 47	48 49	50 51	52 53	54 55	56	57	58 59	60 61	62 63	64 65	66 67	68 69	70	71	72	73 74
1	1	1	1	G	B				D	R	S	Y	1	1	P			6	4		D	0	3	A				B	F	A	A	0	0			~~B E A~~ A	~~0~~		A		0	1

CARD 68

TIME ALERT TO LOC.	PROB IN RTE	FAIL TO REACH	REASON	TIME LOC TO RCH.	LOCATOR MEANS	LOC PROB	SURV. SIG. PROB.	TYPE A/C	TYPE MIS	RESCUE PROBLEMS	RESCUE PROBLEMS	RESCUE PROBLEMS	RESCUE PROBLEMS	SURVIVOR PROBLEMS	SURV. COND	SURV. COND	TIME RCH. TO ACC.	TOT. TIME	RES. REC.	SEQ OF IND
16 17	18	19	20	21 22	23 24	25 26	27 28	29	30	31 32	33 34	35 36	37 38	39 40	41 42	43 44	45 46	47 48	49 50	51 52	53 54	55 56	57 58	59 60	61 62	63 64	65 66	67 68	69 70	71 72	73 74
0	6			1	0	1						B	F	R	H	Q	D	F	D	A	E	J	3	E	J	0	3	1	9	R	0	1

REQUEST FOR CODE SHEET CHANGES

9 MAY 1967
(Date)

From: A+R Dept.

To: (1) Coder [illegible]
(2) M&M 05-12-67
(3) Log Clerk BB 12 MAY 1967
(4) IBM [illegible]
(5) File Clerk

Return to: Open File
Closed File
Master Coder
Other

Ident. No. [illegible] Model [illegible] BUNO [illegible] Model Code [illegible]

Card #1 - Chg. col. 56-57 to —
" " 69-71 to 2 C2
" " [redacted]
" " [redacted]

Chg. col. to
" " to
" " to
" " to

Card #2 - Chg. col. to
" " to
" " to

Chg. col. to
" " to
" " to

Card # Name

Chg. col. to
" " to
" " to
" " to

Card # Name

Chg. col. to
" " to
" " to
" " to

Note IBM - destroy M+M narrative
punch new one -

USE THIS SECTION FOR CHANGES TO CARDS 31 THROUGH 59 AND CARDS 20 THROUGH 29.

Card #	Chg. col.	to	Card #	Chg. col.	to
" "	" "	to	" "	Chg. col.	to
" "	" "	to	" "	Chg. col.	to
" "	" "	to	" "	Chg. col.	to
" "	" "	to	" "	Chg. col.	to
" "	" "	to	" "	Chg. col.	to

☑ Card # (s) NARRATIVE IBM. SEE CHANGES TO NARRATIVE BRIEF.
ORIGINATOR, USE REVERSE SIDE FOR CHANGES TO BRIEF.

NOTE: (1) A separate change sheet will be used for each A/C involved.
(2) Change sheet will be stapled to code sheet.

(b) (6) [redacted]

Originator's Signature

☑ Change to 5 x 8 card required.

REQUEST FOR CODE SHEET CHANGES

6-1-67
(Date)

From: M&M Dept.
To: (1) Coder [illegible] 6/2/67
(2) M&M [illegible]
(3) Log Clerk [illegible] 6/2
(4) IBM
(5) File Clerk

08 JUN 1967

Return to: Open File
Closed File
Master Coder
Other

Ident. No. 70127102 Model A1H BUNO 139728 Model Code 31

Card #1 - Chg. col. ____ to ____ Chg. col. ____ to ____
" " ____ to ____ " " ____ to ____
" " ____ to ____ " " ____ to ____
" " ____ to ____ " " ____ to ____

Card #2 - Chg. col. ____ to ____ Chg. col. ____ to ____
" " ____ to ____ " " ____ to ____
" " ____ to ____ " " ____ to ____

Card # ____ Name ____ Chg. col. ____ to ____
" " ____ to ____
____ to ____
____ to ____

Card # ____ Name ____ Chg. col. ____ to ____
" " ____ to ____
" " ____ to ____
" " ____ to ____

USE THIS SECTION FOR CHANGES TO CARDS 31 THROUGH 59 AND CARDS 20 THROUGH 29.

Card #	Chg. col.		Card #	Chg. col.	
34	25	— ✓			
	26-31	42799 ✓			
	34-37	3527 ✓			
	39	3 ✓			
	41	5 ✓			
	44-46	703 ✓			

☐ Card #(s) ____ IBM, SEE CHANGES TO NARRATIVE BRIEF.
ORIGINATOR, USE REVERSE SIDE FOR CHANGES TO BRIEF.

NOTE: (1) A separate change sheet will be used for each A/C involved.
(2) Change sheet will be stapled to code sheet.

(b) (6) [redacted]
Originator's Signature

☐ Change to 5 x 8 card required.

REQUEST FOR CODE SHEET CHANGES

From: _____ Dept. _____ (Date)

To: (1) Coder _____
(2) M&M _____
(3) Log Clerk _____
(4) IBM _____ 20 APR 1967
(5) File Clerk _____

Return to: Open File _____
Closed File _____
Master Coder _____
Other _____

Ident. No. _____ Model _____ BUNO _____ Model Code _____

Card #1 - Chg. col. _____ to _____ Chg. col. _____ to _____
" " _____ to _____ " " _____ to _____
" " _____ to _____ " " _____ to _____
" " _____ to _____ " " _____ to _____

Card #2 - Chg. col. _____ to _____ Chg. col. _____ to _____
" " _____ to _____ " " _____ to _____
" " _____ to _____ " " _____ to _____

Card # _____ Name _____ Chg. col. _____ to _____
" " _____ to _____
_____ to _____
_____ to _____

Card # _____ Name _____ Chg. col. _____ to _____
" " _____ to _____
" " _____ to _____
" " _____ to _____

USE THIS SECTION FOR CHANGES TO CARDS 31 THROUGH 59 AND CARDS 20 THROUGH 29.

Card # _____ Chg. col. _____ to _____ Card # _____ Chg. col. _____ to _____
" " _____ " " _____ to _____ " " _____ " " _____ to _____
" " _____ " " _____ to _____ " " _____ " " _____ to _____
" " _____ " " _____ to _____ " " _____ " " _____ to _____
" " _____ " " _____ to _____ " " _____ " " _____ to _____
" " _____ " " _____ to _____ " " _____ " " _____ to _____

☐ Card #(s) _____ IBM, SEE CHANGES TO NARRATIVE BRIEF.
ORIGINATOR, USE REVERSE SIDE FOR CHANGES TO BRIEF.

NOTE: (1) A separate change sheet will be used for each A/C involved.
(2) Change sheet will be stapled to code sheet.

_____
Originator's Signature

☐ Change to 5 x 8 card required.

MAINTENANCE AND MATERIAL CODE SHEET (Narrative brief on reverse)

SND 4621 (Rev. 10/64)

MAINTENANCE AND MATERIAL CARD NUMBER 33		CARD COL.
PRIMARY INVOLVED MATERIAL COMPONENT	P Ø 6 Ø 1	16-21
SECONDARY INVOLVED MATERIAL COMPONENT		24-29
PROBABLE INVOLVED MATERIAL COMPONENT		32-37
SPECIAL DATA AND CONDITIONS	P Ø 3	40-42
SPECIAL DATA AND CONDITIONS	P 1 6	44-46
SPECIAL DATA AND CONDITIONS	P 3 5	48-50
SPECIAL DATA AND CONDITIONS	A A A	52-54
SPECIAL DATA AND CONDITIONS		56-58
SPECIAL DATA AND CONDITIONS		61-63
FIRST MAINT FLT/SPEC COMPONENT	F	65-68
CARD NUMBER	3 3	79-80

MAINTENANCE AND MATERIAL CARD NUMBER 34		CARD COL.
PRIMARY INVOLVED MATERIAL COMPONENT		
MFG P/N	~~2 2 6 1 9 5 4~~ 4 2 7 9 9 8	16-31
TOTAL HOURS	3 5 2 7	34-37
OVERHAUL ACTIVITY	3	39
NUMBER OF OVERHAULS	5	41
HOURS SINCE OVERHAUL	7 Ø 3	43-46
AIRCRAFT TOUR		48
AIRCRAFT FLIGHT HOURS SINCE ACCEPTANCE	Y	50
AIRCRAFT FLIGHT HOURS SINCE LAST INSPECTION	2 5	53-55
DAYS SINCE LAST AIRCRAFT INSPECTION	3 1	57-58
TYPE LAST AIRCRAFT INSPECTION	C	61
MONTHS SINCE PAR/OVERHAUL	1 7	67-68
CARD NUMBER	3 4	79-80

MAINTENANCE AND MATERIAL CARD NUMBER 35		CARD COL.
PROBABLE OR SECONDARY INVOLVED MATERIAL COMPONENT:		
MFG P/N		16-31
TOTAL HOURS		34-37
OVERHAUL ACTIVITY		39
NUMBER OF OVERHAULS		41
HOURS SINCE OVERHAUL		43-46
POWER PLANT MODEL NUMBER	3 3 5 Ø 2 6 W D	49-56
POWER PLANT SERIAL NUMBER	W 5 3 1 Ø 9 Ø	58-64
DIR	2	68
CARD NUMBER	3 5	79-80

CAUSE FACTORS: 3 2 1 J Q

COMPONENT NO. 1: P

COMPONENT NO. 2:

DESIGN:

POSSIBLE CAUSE FACTORS:

COMPONENT:

DESIGN:

ACCIDENT DAMAGE: A (9)

ACCIDENT INJURY: A (10)

Don't Count	Enemy Action		Other Aircraft		
I.D. NO.	YR	MO	DAY	TYP	SEQ
1	2	3	4 5	6	7 8
7	Ø	1	2 7	1	Ø 2

Model: - A 1 H (11 12 13 14 15)

SPECIAL ATTN: ("X")

Model Code: 3 1 (76 77)

COORDINATOR	M&M CODING RECORD			FOR IBM	
				P	M
				PUNCHED	VERIFIED
DIVISION OFFICER	DATE CODED: 2-21-67	CODED BY: [signature]	LOGGED	PUNCHED: 31 MAR 1967	VERIFIED

FOR M&M FILING ONLY

MODEL	BUNO	DATE	IDENT. NUMBER

REPORT NUMBER

CUSTODIAN

REWRITE

SHORTLY AFTER T/O
ACFT HAD AN IN-FLT FIRE. PLT DECLARED EMERG AND TURN-
ED BACK TO FLD. WITH LDG LOWERED + FLAPS UP, AN
ATTEMPTED APPR TO DUTY RWY WAS INITIATED. PLT REAL-
IZED THAT APPR END OF RWY COULD NOT BE MADE, REQ +
WAS CLEARED FOR MID-FLD LAN. SINK RATE OBSR TO
INCREASE AT 90 DEG POSIT, IMPACTED GND AT 45 DEG
POSIT WITH EXPLO. CRASH CREW UNABLE TO EXTRACT PLT
FROM CKPT DUE FIRE, HEAT, SMOKE + FOGGING VISORS. PLT
EXPIRED IN CKPT, DUE ASPHYXIATION + BURNS. STA HELO +
HOIST UTILIZED TO LIFT PLT FREE. PRI CAUSE- MAT- NR
10 CYL EXH PIPE EXTENSION SEP FROM EXH SYS. CONTRIB-
UTING- PLT- IMPROPER EMERG TECHNIQUE. OTHER PERS-
CRASH + RESCUE CREW- DELAY OF 2 OF 3 CRASH VEHICLES
ON TERRAIN + DISCREP WITH PORTABLE FIRE EXTINGUISHER.
POSS CONTRIBUTING- OTHER PERS- MAINT- DUPING CYL CHG
PRIOR TO THIS FLT. D/R FAILED TO DETERMINE CAUSE OF
EXH STACK FAILURE.

CARD NO. 79 80

SND 4621 (Rev. 11/65)(Back)

DISPATCH CARD
A/C ACCIDENTS ONLY
(REV 4-65)

CODED [illegible] DATE 1-30
LOGGED [illegible] DATE [illegible]
PUNCHED [illegible] DATE 01 FEB 1967

SUBJECT	DON'T COUNT		ENEMY ACTION		OTHER AIRCRAFT				CARD COLUMNS
IDENTIFICATION		7	Ø	1	2	7	1	Ø	2	1-8
ACCIDENT DAMAGE									A	9
ACCIDENT INJURY									A	10
MODEL AIRCRAFT					–	A	1	A		11-13
BUREAU NUMBER				1	3	9	7	2	8	14-21
REPORTING CUSTODIAN							1	6	C	22-24
TYPE DUTY									5	25
MAJOR COMMAND									1	26
AIRCRAFT DAMAGE									A	27
AIRCRAFT INJURY									A	28
TIME OF DAY									2	29
CARRIER HULL NO.										30
FIRST ACCIDENT TYPE		(b)						D	1	31-32
FIRST PHASE OF OPERATION		(b)					4	5		33-35
TYPE OF OPERATION								3		41-42
CONTRIBUTING CAUSE FACTORS								3		43-44
NUMBER "A" OR "L" OR "U" INJURIES								Ø	1	45-46
SPECIAL DATA AND CONDITIONS						G				62-65
PRIMARY CAUSE									3	67
DISPATCH CARD									[illegible]	74
FISCAL YEAR									7	75
MODEL CODE								3	1	76-77

IBM NOTE: Keypunch a "12" overpunch in card column 8 to denote other aircraft.

NAVAL AVIATION SAFETY CENTER
NAVAL AIR STATION
NORFOLK, VIRGINIA 23511

113/lr
Ser 591
18 May 1967

SPECIAL HANDLING REQUIRED
IAW OPNAVINST 3750.6 SERIES
FOR OFFICIAL USE ONLY

From: Commander, Naval Aviation Safety Center
To: Commanding Officer, Attack Squadron ONE FIVE TWO

Subj: VA-152 AAR ser 1-67A concerning A-1H BuNo 139728 accident occurring 27 January 1967, pilot ZAMBORI

1. The subject report and all endorsements thereon have been reviewed. Commander, Naval Aviation Safety Center concurs with the comments and recommendations of the Aircraft Accident Board as modified by subsequent endorsers with the following remarks.

2. The possibility of maintenance error during installation of the No. 10 cylinder exhaust system has been recorded as a possible contributing factor.

3. By separate correspondence Commander, Naval Air Systems Command has been requested to comment on recommendations 2, 3, and 5, Part IX of the basic report.

4. The cause of this accident has been recorded at the NAVAVNSAFECEN as follows:

a. PRIMARY FACTOR: MATERIAL (No. 10 cylinder exhaust pipe extension separation from exhaust system).

b. CONTRIBUTING FACTORS:

(1) PILOT (improper emergency technique).

(2) OTHER PERSONNEL (crash and rescue crew delay in effecting rescue contributed to severity of injury).

c. POSSIBLE CONTRIBUTING FACTOR: OTHER PERSONNEL (maintenance).

W. A. Kiernan

W. A. KIERNAN
Chief of Staff
(Acting)

Copy to:
NAVAIRSYSCOMHQ (AIR 404) (2)
COMNAVAIRPAC
COMFAIRALAMEDA
COMCVW-16
CO NAS LEMOORE

FOR OFFICIAL USE ONLY

7

DEPARTMENT COMMENTS FOR "CLOSE OUT" LETTER ON ORIGINAL REVIEW

NOTE: 1. Negative report is required.
2. Positive comments will be in a format suitable for inclusion in the "close out" letter.
3. Attach additional sheets if more space is required.

M&M DEPT: CONCUR with the Recommendations EXCEPT THAT Portion OF #5 Where its Recommendated THAT GREB 202 Be Reviewed GREB 202 Dealing with Cylinder Change Vice Engine Change IS EXPLICIT IN its Present FORMAT.

(See attached)

2015

Att 201B A 201

INITIAL/CODE

AERO-MED DEPT: Concur with comments & recommendations of AAR-MOR MO/42

No Comment HUP/433

INITIAL/CODE

M&M Dept

THE PRIMARY DIR OF THE ENGINE REVEALED CAUSE OF ENGINE FIRE WAS DUE TO NUMBER TEN CYLINDER EXHAUST PIPE EXTENSION SEPARATION FROM EXHAUST SYSTEM. AS STATED BY THE ACCIDENT BOARD THE POSSIBILITY OF MAINTENANCE ERROR CANNOT BE EXCLUDED, SINCE NUMBER TEN CYLINDER HAD JUST BEEN REPLACED PRIOR TO THE FLIGHT. THE WEIGHT REP ATTACHED TO VA122, WAS OF THE OPINION THAT PROVISIONS OF PART I; GREB 202 WAS NOT COMPLIED WITH AT THE TIME OF THE CYLINDER CHANGE.

PART I OF GREB 202 IS QUOTED FOR INFORMATION.

QUOTE: "COMPLETE FAILURE OF A PISTON, PISTON PIN OR FAILURE OF A VALVE TO THE EXTENT THAT THE RESULTANT DAMAGE TO THE PISTON SHOWS EVIDENCE OF POUNDING BY A LARGE PORTION OF THE VALVE SHALL BE SUFFICIENT CAUSE FOR REMOVAL OF THE ENGINE EVEN THOUGH METAL PARTICLES MAY NOT HAVE BEEN GENERATED INTO THE OIL SYSTEM. PECKING OR NICKING OF THE PISTON CAUSED BY FAILURE OF A SPARK PLUG ELECTRODE, FUEL INJECTION NOZZLE OR OTHER SMALL FOREIGN OBJECTS ALONE IS NOT SUFFICIENT CAUSE FOR ENGINE REMOVAL. MINOR PISTON DAMAGE SHALL BE CAUSE FOR REPLACEMENT OF THE CYLINDER ONLY." UNQUOTE.

(b) (5) [redacted]

(b) (5) [redacted]

INFORMATION IN THE DIR WHICH ADDITIONAL SUPPORTS THIS CONCLUSION STATES:

"ENGINE AND OIL COOLER CONTAMINATED WITH ALUMINUM PARTICLES.] DETAILED INSPECTION REVEALED NO INTERNAL ALUMINUM PARTS FAILURE (OR WEAR, INDICATING OIL SYSTEM WAS CONTAMINATED FROM PRIOR CYLINDER CHANGE."

COMPLETION SHEET

Action to Correction to		Action Required	Completed Code/Date
3750-1			/
DIR			/
Misc. Items for Action or Correction			
To Code	From Code/Date	No MOR; ~~No dispatch code sheet~~	
	/	[illegible] received 2-21-67 coded on 2-21-67 [illegible]	/
	/	not possible litigation for now per [illegible] Averiding/Hassell 4-10-67 [illegible]	/
	/		/
Aero Mgt	531 / 4-24-67	Please comment for close out letter! [illegible]	/
	/		/
	/	CLOSED 18 MAY 1967	/
	/		/
	/	Closed subject to being reopened when or if Com Nav Air Sys is heard from.	/
	/	[redacted] per Chief [redacted] 11/30/67	/

Endorsements Reviewed and Acton Completed on All Phases of this Report.

UNIT VA-152

MODEL A1H

BUNO 139728

AAR REVIEW ROUTING SHEET

ADVANCE ROUTING

PRI	DEPT	DATE IN	DATE OUT	INIT	INTER DEPT	ROUTING	CODE/INIT
	M&M	3-9-67	3-16	[illegible]	/	/	/
	AERO MED	4-25-67 3-22-67		[illegible]	/	/	9-13-67 [illegible]

DEPARTMENT REPRESENTATIVES INITIALS FOR RECEIPT OF REPORTS

REMARKS

ORIGINAL ROUTING

DEADLINE DATE OUT OF NASC 13 MAY 1967 (10 working days)

EXTENSIONS

DEPT	DATE IN	DEPT DEADLINE	DATE OUT	INIT	INTER DEPT ROUTING
A&R	4-28-67		5-3-67	[illegible]/123	/

NASC ENDORSEMENT ROUTING

PRI	DEPT	DATE IN	DATE OUT	INIT
1	R&S	5/12/67	[illegible]	
2	M&M		5-12	[illegible]
3	ADMIN			

6/2/67 6/2/67 [illegible]

ROUTING AFTER CLOSE OUT

DEPT	DATE IN	DATE OUT	INIT	INTER DEPT	ROUTING
AERO MED			9-13-67 WCC	/	/

NOTES
1. No person other than those assigned to the Records Control Branch will remove any part of this document from the folder.
2. Departments will be fully responsible and accountable for documents in their custody until checked back into Records Control Branch.
3. Any Department desiring to retain this report longer than five (5) working days must notify Records Control Branch of their need for extension.

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D. C. 20360

IN REPLY REFER TO
AIR-4041:WHH

12 JAN 1968

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

From: Commander, Naval Air Systems Command
To: Commander, U. S. Naval Aviation Safety Center

Subj: VA-152 AAR ser 1-67A concerning A-1H BuNo 139728 accident occurring 27 January 1967, pilot ZAMBORI

Ref: (a) COMNAVAVNSAFECEN ltr Ser 592 of 18 May 1967

1. As requested by reference (a), the following comments regarding recommendations 2, 3, and 5 of subject report are forwarded for information:

a. Naval Air Systems Command and Naval Facilities Engineering Command are currently pursuing a joint effort for development of an amphibious tracked fire-fighting vehicle. Currently, a prototype M-116 amphibious tracked vehicle has been assigned to Naval Air Station Oceana for test and evaluation. Upon completion of the evaluation, NAVAIR will make a determination regarding the vehicle's adverse terrain and fire-fighting capabilities.

b. OPNAVINST 11320.15 requires all fire stations to have emergency breathing equipment; however, the equipment must be procured with local operation and maintenance funds. It is therefore recommended that the contents of this report be given wide dissemination in order to preclude service retention of antiquated equipment. In addition, it is further recommended that all command inspections include close scrutiny of emergency breathing equipment.

c. It must be noted that, in the course of either an engine or cylinder change, the exhaust clamp connection between the airframe and engine remains the same. In this accident the airframe clamp connection failure percipitated the induction system fire and resultant loss of power. Thus, the decision to change the engine vice the cylinder would not have affected the final outcome. Therefore, the recommendation to change General Reciprocating Engine Bulletin 202 to require engine change instead of making allowances for cylinder changes is not at this time considered warranted.

A. T. PIMENTEL, JR.
By direction

Copy to:
(see next page)

AIR-4041:WHH

12 JAN 1968

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Subj: VA-152 AAR ser 1-67A concerning A-1H BuNo 139728 accident occurring 27 January 1967, pilot ZAMBORI

Copy to:
COMNAVAIRPAC
COMFAIRALAMEDA
COMATKCARAIRWING 16
CO ATKRON 152
CO NAS LEMOORE
CNO (Op-05F)

3750
80/ 26550

3 MAY 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH OPNAVINST 3750.6 SERIES

FOURTH ENDORSEMENT on CO, ATKRON 152 ltr ser 171 of 15 Mar 1967

From: Commander Naval Air Force, U.S. Pacific Fleet
To: Commander, U.S. Naval Aviation Safety Center

Subj: Aircraft Accident Report; comments on

1. Forwarded.

L. F. COOPER
By direction

Copy to:
NAVAIRSYSCOMHQ
COMATKCARAIRWING 16
CO, NAS LEMOORE
COMFAIRALAMEDA
NAVPLANTREPO LBEACH
CO, ATKRON 152

FF7-2/3750
Ser 302/ 2170
28 APR 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH OPNAVINST 3750.6 SERIES

THIRD ENDORSEMENT on CO, ATKRON 152 ltr Ser 171 of 15 Mar 1967

From: Commander Fleet Air Alameda
To: Commander, Naval Aviation Safety Center
Via: Commander Naval Air Force, U. S. Pacific Fleet

Subj: Aircraft Accident Report; comments on

1. Forwarded.

(b) (6)
[redacted]

Chief Staff Officer

Copy to:
CO, ATKRON 152

AS:JLK:ke
3750
Ser 904
19 Apr 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

SECOND ENDORSEMENT ON CO, ATKRON ONE FIVE TWO (VA-152) ltr ser 171 of 15 Mar 67

From: Commanding Officer, U. S. Naval Air Station, Lemoore, California
To: Commander Naval Aviation Safety Center
Via: (1) Commander Fleet Air Alameda
(2) Commander Naval Air Force, U. S. Pacific Fleet

Subj: Aircraft Accident Report; comments on

1. Forwarded.

R. O. BOE
Acting

Copy to:
NAVAVSAFECEN (2)
NAVAIRSYSCOMHQ
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH
COM CVW 16
CO VA 152

ORIGINAL

FF12/CVW16/ap
3750
Ser: 130
12 Apr 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

FIRST ENDORSEMENT ON CO, ATKRON ONE FIVE TWO (VA-152) ltr ser 171 of 15 Mar 67

From: Commander Attack Carrier Air Wing SIXTEEN
To: Commander, Naval Aviation Safety Center
Via: (1) Commanding Officer, U.S. Naval Air Station, Lemoore, California
(2) Commander Fleet Air Alameda
(3) Commander Naval Air Force, U.S. Pacific Fleet

Subj: Aircraft Accident Report; comments on

1. Forwarded.

B H Shepherd
B. H. SHEPHERD

Copy to:
NAVAVNSAFECEN (2)
NAVAIRSYSCOMD
CO, NAS LEMOORE
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH
CO, ATKRON 152

ORIGINAL

ATTACK SQUADRON ONE FIVE TWO

FLEET POST OFFICE

SAN FRANCISCO, CALIFORNIA 96601

FF12/VA-152
3750:00:sr
Ser 171
15 MAR 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAV INST 3750.6 SERIES

From: Commanding Officer, Attack Squadron ONE FIVE TWO (VA-152)
To: Commander, Naval Aviation Safety Center
Via: (1) Commander, Attack Carrier Air Wing SIXTEEN
(2) Commanding Officer, Naval Air Station, Lemoore, California
(3) Commander Fleet Air, Alameda
(4) Commander Naval Air Force, U.S. Pacific Fleet

Subj: Aircraft Accident Report; comments on

Ref: (a) COMCVW-16 SECOND ENDORSEMENT on VA-152 AAR 1-67A, 27 JAN 1967, A1H BUNO 139728, Pilot: ZAMBORI of 28 FEB 1967

1. Paragraph 2 to reference (a) directed the Commanding Officer, Attack Squadron ONE FIVE TWO to comment on the second paragraph of Section B, Part VII to the basic correspondence.

(b) (5)

[redacted]

FF12/VA-152
3750:00:sr

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAV INST 3750.6 SERIES

(b) (5) [redacted] (b) (5)

G. H. SMITH

Copy to:
NAVAVNSAFCEN (2)
NAVAIRSYSCOMD
COMCVW-16
CO, NAS LEMOORE
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH

3750
80/ 2-078

25 APR 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH OPNAVINST 3750.6 SERIES

FIFTH ENDORSEMENT on VA-152 AAR ser 1-67A concerning A-1H BuNo 139728 accident occurring 27 January 1967, pilot ZAMBORI

From: Commander Naval Air Force, U.S. Pacific Fleet
To: Commander, U.S. Naval Aviation Safety Center

Subj: VA-152 AAR ser 1-67A

1. Forwarded, concurring with the conlusions and recommendations of the Aircraft Accident Board, as modified by the remarks contained in subsequent endorsements.

2. The modification program to install a low altitude ejection system in A-1 aircraft will commence in May 1967.

V. R. HUBLER
By direction

Copy to:
NAVAIRSYSCOMHQ
COMNAVAVNSAFECEN (2)
COMATKCARAIRWING 16
COMFAIRALAMEDA
CO ATKRON 152
CO ATKRON 122
CO NAS LEMOORE
NLO, DIRECTORATE AEROSAFETY, NORTON AFB

AS:JLK:ke
3750
Ser 904
19 Apr 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

SECOND ENDORSEMENT ON CO, ATKRON ONE FIVE TWO (VA-152) ltr ser 171 of 15 Mar 67

From: Commanding Officer, U. S. Naval Air Station, Lemoore, California
To: Commander, Naval Aviation Safety Center
Via: (1) Commander, Fleet Air Alameda
(2) Commander, Naval Air Force, U. S. Pacific Fleet

Subj: Aircraft Accident Report; comments on

1. Forwarded.

R. O. BOE
Acting

Copy to:
NAVAVSAFECEN (2)
NAVAIRSYSCOMHQ
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH
COM CVW 16
CO VA 152

ORIGINAL

FF7-2/3750
Ser 301B/1890
14 April 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH OPNAV INSTRUCTION 3750.6 SERIES

FOURTH ENDORSEMENT on VA-152, serial 1-67A concerning A1H
BUSO 139728, Accident occurring 27 Jan-1967, pilot ZAMBORI

From: Commander Fleet Air Alameda
To: Commander, U. S. Naval Aviation Safety Center
Via: Commander Naval Air Force, U. S. Pacific Fleet

Subj: ATKRON 152 AAR ser 1-67A; forwarding of

1. Forwarded, concurring in the comments and recommendations of the Aircraft Accident Board, and in the remarks contained in the preceding endorsements subject to the following comments.

(b) (5)
[redacted]

(b) (6)
[redacted]

Chief Staff Officer

Copy to:
NAVAIRSYSCOMHQ
COMNAVAVNSAFECEN (2) (Airmail direct)
CO, NAS LEMOORE
COMATKCARAIRWING 16
CO, ATKRON 152
CAPLANTREPOLNEACH

ORIGINAL

FF12/CVW16/ap
3750
Ser: 130
12 Apr 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

FIRST ENDORSEMENT ON CO, ATKRON ONE FIVE TWO (VA-152) ltr ser 171 of 15 Mar 67

From: Commander Attack Carrier Air Wing SIXTEEN
To: Commander, Naval Aviation Safety Center
Via: (1) Commanding Officer, U.S. Naval Air Station, Lemoore, California
(2) Commander Fleet Air Alameda
(3) Commander Naval Air Force, U.S. Pacific Fleet

Subj: Aircraft Accident Report; comments on

1. Forwarded.

B. H. SHEPHERD

Copy to:
NAVAVNSAFECEN (2)
NAVAIRSYSCOMD
CO, NAS LEMOORE
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH
CO, ATKRON 152

113-I

FF12/VA-152
3750:00:sr
21 March 1967

FOR OFFICIAL USE ONLY

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

From: Commanding Officer, Attack Squadron ONE FIVE TWO

To: Commander, U. S. Naval Aviation Safety Center

Subj: Supplementary Accident Data concerning VA-152 AAR serial 1-67A-A1H BUNO 139728 occurring 27 January 1967, Pilot ZAMBORI

submission of

Ref: (a) NASC ltr ser: 50/B91 of 7 MAR 1967

Encl: (1) Supplementary Accident Data Form for subject accident pages 1 through 5
(2) Reproduction of subject pilot's log covering month of accident and two (2) preceding calendar months
(X) ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~
(X) ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

1. As requested by reference (a), the enclosures are forwarded.

D. M. Willson
D. M. WILLSON

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FOR OFFICIAL USE ONLY

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

SUPPLEMENTARY ACCIDENT DATA

In addition to answering the following questions, enclose a duplicate of the pilot's log covering the month in which the accident occurred as well as the preceding two calendar months.

1. Date of mishap: year 1967 month JAN day 27
2. Aircraft model A4A
3. Bureau Number of aircraft 139728
4. Reporting custodian VA-152
5. Pilot file number (b) (6) [redacted]
6. Branch of service: Marine ____ Navy ✓
7. Readiness Attack Carrier Air Wing (RCVW) trained? Yes ✓ No ____

   If Yes, date completed 11/23/1963

   RCVW Squadron VA-122
8. Percentage of training completed if in a formal training status NA
9. Length of time (mo.) in present squadron 38
10. Pilot currently qualified in following aircraft (model and series)

    A4A/I ____ ____ ____ ____

FOR OFFICIAL USE ONLY

11. a. Specify training time (hrs.) with reference to date of mishap as follows:

	WST		OFT		CPT		LINK
	This model	All other models	This model	All other models	This model	All other models	
Previous 12 months							
Previous 6 months							
Previous 3 months							
Previous 1 month							

If training time in this model during previous three months was less than 3 hours in Weapons Systems Trainer (WST), Operational Flight Trainer (OFT), or Cockpit Training (CPT), indicate reason by checking appropriate spaces in part b.

b.

	WST	OFT	CPT	LINK
(1) Pilot deployed				
(2) Trainer not in area (station ALAMEDA)	✓	✓		✓
(3) Down for maintenance				
(4) Not available due to trainer schedule				
(5) Lack of trainer personnel				
(6) Not available due to pilot's schedule				
(7) Other reasons (specify) NOT APPLICABLE			✓	

12. If flight was a maintenance test flight, was pilot designated by Commanding Officer as qualified maintenance test pilot? Yes ✓ No ___

13. Commanding Officer's rating of pilot's ability: Superior ___ Average ✓ Below Average ___

14. Length of time (mo.) Commanding Officer

    a. Has been aboard 24

    b. Has been in command of this squadron 11

15. Estimate of total time (hrs.) involved in accident investigation by:

    a. Accident board members 220

    b. Wreckage recovery and salvage 90

    c. Supporting Personnel 50

16. Best estimate of operation and maintenance funds expended for investigation and salvage (e.g. civilian salaries, O&R cost, equipment rental, etc.) $ UNK

Attach itemized breakdown.

17. Did landing cause a delay in wreckage recovery? Yes ___ No ✓

    If Yes, how long? ___ (days)

18. Was equipment for wreckage recovery adequate? Yes ✓ No ___

    If No, list deficiencies. ___

19. Number of accident board members 4

20. Specify number of accident board members who have attended the following schools :

a. Safety Officer's School, USC 1

b. Safety Officer's School, Monterey ____

c. Safety Center 5-day ASO School ____

d. Monterey Baccalaureate Curriculum Safety Course ____

e. _____ ____

f. None of the above 3

21. Specify by checking if the:

	Manufacturer's Technical Reps were			Manufacturer's Engineers were		
	Requested	Available	Utilized	Requested	Available	Utilized
Airframe		✓				
Engine			✓			
Other						

22. Was pre-accident plan adequate? Yes ✓ No ____

23. Did previous training adequately prepare the accident board for its duties?

Yes ✓ No ___

(If answer to questions 22 or 23 is No, please make comments)

COMMENTS:

24. Has the command submitted any previous recommendation that included factors similar to those associated with this mishap? Yes ___ No ✓

COMMENTS:

MONTH NOVEMBER YEAR 1966

CODES: A—actual S—simulated G—GCA R—radio range C—CCA F—ADF I—ILS J—jet X—Catapult

DAY	AIRCRAFT MODEL	AIRCRAFT SERIAL NUMBER	KIND OF FLIGHT CODE*	PILOT TIME TOTAL PILOT TIME	PILOT TIME FIRST PILOT	PILOT TIME CO-PILOT	PILOT TIME DUAL PILOT	SPECIAL CREW TIME	INSTRUMENT TIME DAY INST. TIME	INSTRUMENT TIME DAY A.S.	INSTRUMENT TIME NIGHT INST. TIME	INSTRUMENT TIME NIGHT A.S.	NIGHT VFR TIME	LANDINGS FCL	LANDINGS OTHER LAND OR SEA	LANDINGS CARRIER	CATAPULT	STD INST. APPR. COMPLETED NO.	STD INST. APPR. COMPLETED TYPE	STD INST. APPR. COMPLETED A.S.	REMARKS
16	A-1H	137512	1A1	2.2	2.2										1						
29	A-1H	139735	1L	0.5	0.5										1						
30	A-1H	135371	1A1	1.7	1.7										1						
TOTAL THIS PAGE				4.4	4.4	4.4				A		A									
										S		S			3						
BROUGHT FORWARD				1657.5	203.5	203.5			4.4	A	12.8	A	58.4								
										S	0.8	S	58.4		10	65	64				
TOTAL TO DATE				1663.9	207.9	207.9			4.4	A	12.8	A	58.4								
										S	0.8	S			13	65	64				
*See page 2 for codes.				TOTAL ACCUM. PILOT TIME	TOTALS, THIS FISCAL YEAR				TOTALS, THIS FISCAL YEAR												

Pilot-time report submitted through last (or _____) day of this month; noted by _____ (initials)

CERTIFIED A CORRECT RECORD:

Pilot

Approved: J. Harrison
C.O. or authorized deputy

MONTH DECEMBER YEAR 1966

CODES: A—actual S—simulated G—GCA R—radio range C—CCA F—ADF I—ILS J—jet X—Catapult

DAY	AIRCRAFT MODEL	AIRCRAFT SERIAL NUMBER	KIND OF FLIGHT CODE*	PILOT TIME TOTAL PILOT TIME	PILOT TIME FIRST PILOT	PILOT TIME CO-PILOT	PILOT TIME DUAL PILOT	SPECIAL CREW TIME	INSTRUMENT TIME DAY INST. TIME	INSTRUMENT TIME DAY A.S.	INSTRUMENT TIME NIGHT INST. TIME	INSTRUMENT TIME NIGHT A.S.	NIGHT VFR TIME	LANDINGS FCL	LANDINGS OTHER LAND OR SEA	LANDINGS CARRIER	CATAPULT	STD INST. APPR. COMPLETED NO.	STD INST. APPR. COMPLETED TYPE	STD INST. APPR. COMPLETED A.S.	REMARKS
7	A-1H	139770	1A1	2.1	2.1				0.5	S					5			1	T	S	
14	A-1H	135370	1L	1.0	1.0										1						
19	A-1H	135370	1A1	3.1	3.1										1						
29	A-1H	139728	1A1	1.9	1.9										7						
TOTAL THIS PAGE			8.1	8.1	8.1					A		A									
									0.5	S		S			14						
BROUGHT FORWARD			1663.9	207.9	207.9				4.4	A	12.8	A									
										S	0.8	S	58.4		13	65	64				
TOTAL TO DATE			1672.0	216.0	216.0				4.4	A	12.8	A									
									0.5	S	0.8	S	58.4		27	65	64				
*See page 2 for codes.			TOTAL ACCUM. PILOT TIME	TOTALS, THIS FISCAL YEAR					TOTALS, THIS FISCAL YEAR												

CERTIFIED A CORRECT RECORD:

Pilot

Approved:

C. O. or authorized deputy

16—68471-2

16—68471-1

Pilot-time report submitted through last (or _____) day of this month, noted by _____ (initials)

MONTH JANUARY YEAR 1967

CODES: A—actual, S—simulated; G—GCA, R—radio range; C—CCA, F—ADF; I—ILS, J—jet; X—Catapult

DAY	AIRCRAFT MODEL	AIRCRAFT SERIAL NUMBER	KIND OF FLIGHT CODE*	PILOT TIME: TOTAL PILOT TIME	PILOT TIME: FIRST PILOT	PILOT TIME: CO-PILOT	PILOT TIME: DUAL PILOT	SPECIAL CREW TIME	INSTRUMENT TIME: DAY INST. TIME	INSTRUMENT TIME: DAY A.S	INSTRUMENT TIME: NIGHT INST. TIME	INSTRUMENT TIME: NIGHT A.S	NIGHT VFR TIME	LANDINGS: FCL	LANDINGS: OTHER LAND OR SEA	LANDINGS: CARRIER	CATAPULT	STD INST. APPR. COMPLETED: NO.	STD INST. APPR. COMPLETED: TYPE	STD INST. APPR. COMPLETED: A.S	REMARKS
16	A-1H	134567	3A1	2.0	2.0						1.0	S	1.5		4			4	G	S	
19	A-1H	139762	1AT	1.3	1.3				0.2	A					1			1	G	A	
23	A-1H	139770	1L	0.5	0.5										1						NGF
23	A-1H	139770	1L	0.4	0.4										1						"
25	A-1H	134567	1A1	1.9	1.9				1.7	S					1			2	T	S	"
TOTAL THIS PAGE																					
BROUGHT FORWARD																					
TOTAL TO DATE																					
*See page 2 for codes.		TOTAL ACCUM. PILOT TIME		TOTALS, THIS FISCAL YEAR						A		A									
										S		S									
										A		A									
										S		S									
										A		A									
										S		S									
									TOTALS, THIS FISCAL YEAR												

CERTIFIED A CORRECT RECORD:

Pilot

Approved:

C. O. or authorized deputy

Flight-time report submitted through last (or _____) day of this month; noted by _____ (initials)

ASO:JLK:lc
3750
Ser 672

21 MAR 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

THIRD ENDORSEMENT on VA-152 AAR 1-67A, 27 January 1967, A1H BUNO 139728, Pilot ZAMBORI

From: Commanding Officer, U. S. Naval Air Station, Lemoore, California
To: Commander, Naval Aviation Safety Center
Via: (1) Commander Fleet Air, Alameda
(2) Commander Naval Air Force, U. S. Pacific Fleet

Subj: Aircraft Accident Report; forwarding of

Ref: (a) BUWEPSINST 11320.7

1. Forwarded.

2. The training of the crash and rescue crew at U. S. Naval Air Station, Lemoore, is conducted in strict accordance with reference (a). All new personnel are given a 12 day indoctrination course that encompasses the following:

a. Equipment orientation coupled with its various maintenance aspects.

b. Station layout and local flight patterns.

c. Aircraft rescue procedures utilizing rescue charts and transparencies followed by a physical inspection of the various aircraft aboard this station in order to determine the location of fuel valves, batteries, main switches, canopy controls (normal and emergency), and oxygen shut-offs and disconnectors. In addition the indoctrination covers the fonceable entry points and ejection seat rescue procedures along with information as to crew/passenger complement. Familiarization training is also conducted on aircraft that transit NAS Lemoore.

d. Dry runs are made on aircraft mockups to train drivers and crews on apparatus positioning, use of turrets, handlines, ladder positions, and rescue approach. Hot runs involving a practice burning are held weekly on wrecked aircraft utilizing all types of extinguishing agents (foam, water, CO_2, Purple K, and TMB). Special emphasis is placed on shoulder harness, seat belt, and parachute removal. Safety practices concerning armament (rockets, bombs, and cannons), engine intakes, canopy jettison, and ejection seats are covered.

e. Further training covering canopy release, ejection seats, harness removal, and pilot removal is received from qualified personnel from the various onboard squadrons.

f. After the indoctrination period has been completed, a minimum of one hour per day is devoted to the various aspects of crash and rescue training.

ASO:JLK:lc
3750

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

3. This command is fully aware of the limitations of its crash and rescue equipment in transiting the local terrain. The ground vehicles become bogged down in the mud of the irrigated and rain-fed fields, and the station helicopters are limited in useful lift and the lack of approved fire-fighting equipment. This problem was recognized as early as 1961 when correspondence requesting a suitable rescue vehicle was originated. Subsequent replies from higher authority indicated that a ground vehicle able to traverse wet and muddy terrain was unavailable. However, the Goodyear Corporation has recently developed a 12X16.5 wide tread flotation tire that has been installed on a station 4X4 one-ton pickup with a mounted ANSUL unit. It must be emphasized, however, that this is not an overall solution to the crash and rescue problem. It is requested that higher authority study the feasibility of providing stations with a rescue vehicle capable of traversing wet and muddy terrain.

(b) (5)

[redacted]

H. J. Boydstun

H. J. BOYDSTUN

Copy to:
NAVAVSAFECEN (2)
NAVAIRSYSCOMHQ
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH
CO VA-152
COMCVW 16

ORIGINAL

FF12/CVW16/ap
3750
Ser: 78
28 Feb 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAV INST 3750.6 Series

SECOND ENDORSEMENT on VA-152 AAR 1-67A, 27 Jan 1967, A1H BUNO 139728, Pilot: ZAMBORI

From: Commander Attack Carrier Air Wing SIXTEEN
To: Commander, Naval Aviation Safety Center
Via: (1) Commanding Officer, Naval Air Station, Lemoore, California
(2) Commander Fleet Air Alameda
(3) Commander Naval Air Force, U. S. Pacific Fleet

Subj: Aircraft Accident Report; forwarding of

1. Forwarded, concurring in the recommendations and comments of the Aircraft Accident Board and the first endorser.

2. It is noted that the Board commented unfavorably upon LT ZAMBORI's attitude and performance as a pilot and disregard of certain NATOPS procedures. By copy of this endorsement, the Commanding Officer, VA-152 is requested to comment upon the second paragraph of Part VII, Section B to the AAR.

3. This preventable fatality emphasizes the need for NAS Lemoore and all commands responsible for crash and rescue to continually review the adequacy of personnel training as well as adequacy of equipment to preclude future tragic results of this nature. (b) (5) [redacted]

4. (b) (5) [redacted] This accident once again emphasizes the need for a low altitude ejection system in A1 type aircraft.

B. H. SHEPHERD

Copy to:
NAVAVSAFECEN (2)
NAVAIRSYSCOMD
CO, NAS LEMOORE
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH
CO, VA-152

ORIGINAL

17

ORIGINAL

FF12/VA-152
3750:00:sr
Ser 186
23 FEB 1967

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAV INST 3750.6 SERIES

FIRST ENDORSEMENT on VA-152 AAR 1-67A, 27 JAN 1967, A4H BUNO 139728, Pilot: ZAMBORI

From: Commanding Officer, Attack Squadron ONE FIVE TWO (VA-152)
To: Commander, Naval Aviation Safety Center
Via: (1) Commander, Attack Carrier Air Wing SIXTEEN
(2) Commanding Officer, U.S. Naval Air Station, Lemoore, Calif.
(3) Commander Fleet Air, Alameda
(4) Commander Naval Air Force, U.S. Pacific Fleet

Subj: Aircraft Accident Report; forwarding of

1. Forwarded, concuring in the recommendations and comments of the Aircraft Accident Board.

(b) (5) [redacted] (b) (5) [redacted]

cedures has been conducted by all pilots of this command with particular emphasis placed on the above items. Realizing the need for constant reemphasis in the area of basic emergency procedures, the existing safety program has been strengthened along these lines.

3. The aggressiveness on the part of the individual members of the crash crew in their attempts to rescue the pilot is commendable. However, the problem associated with getting rescue equipment to the scene, the inability of the "hot suit men" to breathe in the noxious environment, and, perhaps, some lack of knowledge as to the location of straps and release fittings by members of the crash crew, probably all contributed to the loss of this pilot. The apparent inadequacy of vehicles and equipment should be studied by higher authority. The state of training and knowledge of the crash crew should be investigated and a more energetic and detailed continuing program of training should be instituted, if it is determined that the need exists.

4. This command concurs with the recommendation of the board that General Reciprocating Engine bulletin (GREB) 202 be reviewed. That portion of GREB 202 which states ".....evidence of pounding by a large portion of the valve shall be sufficient cause for removal of the engine.....Minor piston damage shall be cause for replacement of the cylinder only....." is open to a wide range of interpretation. It is

ORIGINAL

FF12/VA-152
3750:00:sr

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAV INST 3750.6 SERIES

recommended that GREB 202 be revised to stipulate that any evidence of contact between the valve and the piston or cylinder walls shall be sufficient cause for an engine change.

5. It is noted that advance copies of the AAR were sent to the Navy Laision Officer, Directorate of Aerospace Safety, and Attack Squadron 122 in error. The return of these copies has been requested by separate correspondence. A copy of this Aircraft Accident Report will be forwarded to the Naval Plant Representative Office, Long Beach.

6. The latest Aircraft Accident Prevention Survey conducted by this command was concluded on 26 January 1967.

G. H. Smith
G. H. SMITH

Copy to:
NAVAVNSAFCEN (2)
NAVAIRSYSCOMD
COMCVW-16
CO, NAS LEMOORE
COMFAIRALAMEDA
COMNAVAIRPAC
NAVPLANTREPO LBEACH

1. OVERHAUL ACTIVITY: NAS ALAMEDA (O&R)		2. REPORT NO.: 353	3. DATE OF D/I: 23 Feb 67	4. ASSEMBLY NOMENCLATURE AND PART NO.			ORIGINAL: X
5. ASSEMBLY (Model): R3350-26WD	6. ASSEMBLY (Serial): W-531090		7. ASSEMBLY SMS: 666L0	8. DATE REMOVED: 28 Jan 67	9. REMOVED FROM (Dog Ser): - -	10. REMOVED FROM (Dog Ser): - -	
11. TOTAL AND SINCE NEW: 3527.5	12. SINCE LAST O/H: 702.9	13. DATE LAST O/H: 23 Sep 63	14. LAST OVERHAUL ACTIVITY: NAS NORFOLK	15. NO. PREV O/H'S: 5	16. AIRCRAFT (Model): A-1H	17. AIRCRAFT (BUNO): 139728	
18. OPERATING ACTIVITY: VA-152		19. PUR. OPD. SER. - I/PO/SO: - -	20. REASON FOR REMOVAL AND CODE: Engine failure - crash				

21. FINDING: O [ ] NO DISCREPANCY; B [ ] BASIC (MFG/DESIGN) DISCREPANCY; N [X] NON-BASIC (MAINT/OPER) DISCREPANCY; F [ ] FOREIGN OBJECT DAMAGE

22. DESCRIPTION OF FINDING (Include name and part no. of primary part failure)

a. The No. 10 cylinder exhaust pipe P/N 427998(IPB) was separated from the balance of the exhaust system. The exhaust pipe retaining clamp bolt AN5-16(IPB) for the No. 10 exhaust pipe was not recovered. The clamp Douglas P/N 4267697-502(IPB) for the No. 10 exaust pipe was broken at both loops for the retaining bolt. No other parts of the exhaust system in this area of the engine (except the No. 10 exhaust pipe clamp) had any major impact damage.

b. The Y-intake pipe P/N 138713N2(IPB) for the Nos. 9 and 10 cylinders had the entire aft portion burned away. The head fins of cylinders 9, 10, and 11 were heavily burned. The No. 9 intake ~~XXXXXXXX~~ and No. 11 exhaust valve pushrod housings were severely burned. The cooling fins and the intake pipe coupling of No. 9 cylinder head were burned away. The intake pipes, cylinder head ~~XXXXXXXXXX~~ fins, pushrod housings, and intake pipe coupling are all located adjacent to the area of the separation of the No. 10

23. PRIMARY PART FAILURE (Part No.): 427998 | CAUS.: 381 | SMS: 59

24. DISCREPANT PARTS (Part No.) | CAUS.:

25. PERTINENT BULLETINS, CHANGES, ETC. INCORPORATED: NUMBER | YES | NO

26. [X] PRIORITY DOR — REPORTED BY: NAVAIRSYSCOMREP 060122Z Feb 67. Control No. 3197-67 — REFERENCE

27. SIGNATURE: [redacted] (b) (6) — TITLE: POWER PLANT ENGR DIV SUPT — DATE: 23 March 1967

28. SUPP. INSP. 114: APPLICABLE / INCORPORATED: X

DISASSEMBLY AND INSPECTION REPORT NAVAER FORM 4720/2 (11-61) — REPORT SERIAL NAVAER 4720-2

exhaust pipe. The cylinder air deflectors for cylinders Nos. 9, 10, and 11 were also severely burned adjacent to the No. 10 exhaust pipe.

c. The internal parts of the engine induction system revealed the presence of preimpact fire. The fire damage was most evident in the area adjacent to the parts for the Nos. 9-10 Y-pipe intake. There was a large amount of aluminum particles in the No. 1 ring groove and in the grooved face of the No. 2 piston ring of the pistons in cylinders Nos. 9 and 10. There was a lesser amount of aluminum particles in piston rings and grooves of adjacent cylinder pistons. The upper pistons (those fartherest away from No. 10) had no metal in their rings or ring grooves.

d. The engine had received light to moderate impact damage and had some damage due to fire after impact. This fire damage was readily isolated from the fire caused by the separation of the exhaust pipe.

e. The engine oil system was contaminated with particles of metal. These particles were established as being aluminum. The oil inlet strainer, the oil cooler, and various internal oil passages of the engine were all found to contain these aluminum particles, however, there was no internal part failure that would cause this contamination.

f. All engine accessories were examined and none had failed prior to impact. The ignition system components were bench checked and operated normally. The engine-driven fuel pump, although damaged by fire, was bench checked and was capable of pumping fuel. The carburetor/manifold absolute pressure regulator were damaged by external fire to the extent no performance check could be made; however, visual inspection indicated that parts were normal prior to fire damage. The propeller blade angle at impact was established at 28 degrees. This is low pitch (high RPM) setting.

70127102

NAS ALAMEDA (O&R)
DIR NO. 353
Assy model R3350-26WD ser W-531090 BUNO 139728

- -

26. CONCLUSIONS:

a. Separation of the No. 10 exhaust pipe from the main exhaust system permitted exhaust leakage to burn through the 9-10 Y-pipe intake. This exhaust pipe separation also resulted in fire damage to the adjacent cylinders and related engine parts. The failure of the intake pipe caused the manifold pressure to drop with subsequent induction system fire and complete loss of power. The exact cause for exhaust pipe separation was not established. The contamination of the engine and oil system is believed to have resulted from a prior failure in No. 10 cylinder. The prior cylinder failure and subsequent engine oil system contamination did not directly cause the engine failure.

27. RECOMMENDATIONS:

a. Although neither the replacement cylinder and piston assembly nor the related articulated rod failed, it is recommended that in the event of a valve or valve guide failure, resulting in sufficient damage to the piston to necessitate piston replacement, the engine be removed for overhaul. Valve and/or valve guide failure will result in contamination of the oil system and can cause severe internal engine damage. Damage to a piston dome by pieces of a failed valve can cause stresses to the articulated rod which may cause a subsequent rod failure. It is recommended that paragraph (a) to Part II of General Reciprocating Engine Bulletin No. 202 be amended to require an engine removal in the event of a valve failure.

DISTRIBUTION:
NAVAIRSYSCOM (AIR-4113) (F-123) (AIR-536)
NAVAIRTECHSERVFAC PHILA
COMNAVAIRPAC
COMFAIRALAMEDA
NAVAIRSYSCOMREPAC
NAVAVNSAFECEN NORVA
VA-152
COMFAIRWESTPAC
COMFAIRHAWAII
DCASO WOODRIDGE
NAS NORVA
NAS PNCLA (CODE 834)
NAS LEMOORE
VA-122
CVW-16

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1A (Rev. 3-63) Page 1

SPECIAL HANDLING REQUIRED in accordance with Para. 66, OPNAV INSTRUCTION 3750.6, effective edition

OPNAV REPORT 3750-1

PART 1 GENERAL

SECTION A. IDENTIFICATION

1. AIRCRAFT ACCIDENT BOARD APPOINTED BY: Commanding Officer VA152	2. SERIAL NO.: 1-67A	3. DTG (LOCAL) OF MISHAP: 271329 JAN	4. MODEL AIRCRAFT: A1H	5. BUREAU NUMBER: 139728
6. TO: Commander, Naval Aviation Safety Center		9. LOCATION OF MISHAP: 8001 East of runway 32R at NAS Lemoore		10. DAMAGE: ALFA
7. VIA: Commanding Officer VA152 COMATKCARAIRWING SIXTEEN CO NAS Lemoore COMFAIRALAMEDA COMNAVAIRPAC	8.	11. TIME OF DAY: Day	12. TIME IN FLIGHT: 0 + 06	13. FLIGHT CODE: 1L
		14. CLEARED FROM: NAS Lemoore TO: NAS Alameda		
		15. TYPE CLEARANCE: VFR	16. AIRSPEED: 80E	17. A/C WEIGHT: 17,000
18. BRIEF DESCRIPTION OF MISHAP: Collision with ground under partial control			19. ELEVATION AT TIME OF MISHAP: 235 TERRAIN: 0	

20. LIST MODEL, BUNO, REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED (Complete OPNAV Form 3750-1 for each A/C)

SECTION B. CONTRIBUTING FACTORS

✓	FACTOR	✓	FACTOR	✓	FACTOR
X	1. PILOT ERROR IN TECHNIQUE/JUDGMENT		9. SERVICING PERSONNEL		17. WEATHER
	2. PILOT DEVIATION FROM NATOPS PROCEDURES		10. LANDING SIGNAL OFFICER		18. DESIGN AIRCRAFT
	3. PILOT INCORRECT OPERATION OF A/C SYSTEM		11. OTHER PERSONNEL (Specify)		19. DESIGN CREW EQUIPMENT
	4. PILOT OTHER (Specify)		12. ADMINISTRATIVE		20. DESIGN OTHER (Specify)
	5. CREW		13. FACILITIES-RUNWAY, OVERRUN, TAXIWAY, FLIGHT DECK		21. ROLLING/PITCHING DECK ROUGH SEAS
	6. MAINTENANCE PERSONNEL		14. FACILITIES-NAV AIDS, LANDING AIDS (PAR, CCA, ILS, MIRROR)	X	22. MATERIAL FAILURE/MALFUNCTION
	7. MAINTENANCE SUPERVISORY PERSONNEL		15. FACILITIES-CATAPULT, ARRESTING GEAR (Ship or field)		23. UNDETERMINED
	8. SUPERVISORY OTHER (Specify)	X	16. FACILITIES OTHER (Specify): Crash and Rescue		24. OTHER (Specify)

SECTION C. PERSONNEL DATA

1. NAME (Last, first, & middle initial)	2. RANK/RATE	3. FILE (SERVICE NO.)	4. [illegible]	5. BRANCH OF SERVICE	6. AGE	7. [illegible]	8. [illegible]	9. POSITION	10. [illegible]
PILOT (at controls at time of mishap): ZAMORI, Donald P.	LT	(b) (6) [redacted]	1315	USNR	28	3½	Pilot	Cockpit	A
CO PILOT (identify & submit separate page 1):									

PILOT EXPERIENCE IN HOURS

ITEM			ITEM		
11. ALL MODELS		1678	17. CV LANDINGS DAY/NIGHT	ALL	200 / 98
				IN MODEL	192 / 98
12. ALL MODELS IN LAST 12 MONTHS		385	18. FCLP LANDINGS LAST 6 MONTHS DAY/NIGHT	ALL	0 / 0
				IN MODEL	0 / 0
13. ALL MODELS IN LAST 3 MONTHS		15	19. INSTRUMENT HOURS LAST 3 MONTHS ACTUAL/SIMULATED	ALL	0 / 1.5
				IN MODEL	0 / 1.5
14. ALL SERIES THIS MODEL	A/C	1112	20. NIGHT HOURS LAST 3 MONTHS	ALL	1.5 /
	OFT/CPT	NA / NA		IN MODEL	1.5 /
15. ALL SERIES THIS MODEL LAST 12 MONTHS	A/C	380	21. TOTAL HOURS IN JETS (if jet mishap) HELOS (if helo mishap)		
	OFT/CPT	NA / NA			
16. ALL SERIES THIS MODEL LAST 3 MONTHS	A/C	15	22. LAST PRIOR FLIGHT ALL SERIES THIS MODEL	DATE	25 JAN 67
	OFT/CPT	NA / NA		DURATION	2+00
23. DATE/GRADE LAST NATOPS STANDARDIZATION CHECK		7 FEB 66 / SAT	24. TYPE INSTRUMENT CARD		SPECIAL

OTHER PERS

25. NAME (Last, first, & middle initial)	26. [illegible]	27. RANK/RATE	28. COMMON 1st SERVICE	29. FILE SERVICE NO.	30. UNIT	31. [illegible]	32. BILLET	33. POSITION

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AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1A (Rev. 3-63) Page 2

SPECIAL HANDLING REQUIRED in accordance with Para. 66, OPNAV INSTRUCTION 3750.6, effective edition.

OPNAV REPORT 3750-1

PART II MAINTENANCE, MATERIAL AND FACILITIES DATA

A. A/C HISTORY

1. DATE OF MANUFACTURE	2. FLIGHT HRS SINCE ACCEPTANCE	3. NO. OF PAR/OVERHAUL	4. MONTHS SINCE LAST PAR/OVERHAUL	5. FLT. HRS SINCE LAST PAR/OVERHAUL	6. LAST/PAR OVERHAUL ACTIVITY	7. TYPE OF LAST CHECK PERFORMED	8. FLIGHT HOURS SINCE LAST CHECK	9. DAYS SINCE LAST CHECK
14 Mar 66	4062	4	17	699	NAS QUONSET PT	FIFTH CALENDAR MAJOR	25	31

B. ENGINE HISTORY

1. ENGINE MODEL	2. ENGINE SERIAL NUMBER	3. FLIGHT HRS SINCE ACCEPTANCE	4. NUMBER OF OVERHAULS	5. WAS DIR REQUESTED?	6. FLT. HRS SINCE LAST OVERHAUL	7. LAST OVERHAUL ACTIVITY	8. TYPE OF LAST CHECK PERFORMED	9. FLIGHT HOURS SINCE LAST CHECK	10. DAYS SINCE LAST CHECK
R3350-26WD	W-531090	3492	5	Yes	703	NAS Norfolk	FIFTH CALENDAR MAJOR	25	31
(2)									
(3)									
(4)									

C. COMPONENT HISTORY

1. COMPONENT INVOLVED NOMENCLATURE	2. MANUFACTURERS PART NUMBER	3. TOTAL HRS ON PART	4. NO. OF OVERHAULS	5. HOURS SINCE LAST OVERHAUL	6. OVERHAUL ACTIVITY	7. WAS DIR REQUESTED?	8. SER. NO. FUR/AMPEUR
(1)							
(2)							
(3)							
(4)							

D. INCIDENTS & GROUND ACCIDENTS

1. PARTS REPAIRED: PART NUMBER	NOMENCLATURE	3. DIRECT MANHOURS INVOLVED	2. PARTS REPLACED: PART NUMBER	NOMENCLATURE

E. ENGINE FAILURES

JET ENGINE FLAMEOUT (include intentional securing to prevent engine damage)

AT TIME OF FLAMEOUT	1. ALTITUDE	2. IAS	3. RPM	4. EGT	5. MANEUVER AT TIME OF FLAMEOUT	6. FUEL FLOW	7. ATTITUDE

8. G FORCES	9. RELIGHT ☐ ATTEMPTED ☐ ACCOMPLISHED	10. ALTITUDE	11. IAS	12. MAX EGT	13. FUEL CONTROL ☐ PRIMARY ☐ MANUAL	14. NO. RELIGHT ATTEMPTS

INTENTIONAL SECURE	15. ENGINE SYMPTOMS	16. CAUSE OF SYMPTOMS

RECIPROCATING ENGINE FAILURE

17. ALTITUDE	18. IAS	19. ATTITUDE	20. RPM	21. MAP	22. TORQUE/FMEP	23. FUEL FLOW PRESSURE	24. OIL PRESSURE
4000'E	150E	UNK	UNK	UNK	UNK	Estimate Normal	Estimate Normal

INTENTIONAL SECURE	25. ENGINE SYMPTOMS	26. CAUSE OF SYMPTOMS
No		

F. OTHER REPORT

IDENTIFY OTHER REPORTS CONCERNING THIS MISHAP

1. AMPFUR SERIAL NUMBER
2. DIR MESSAGE REQUEST DATE-TIME-GROUP 290207Z JAN — Info NASC on DIR request. See para. 30 OPNAVINST P3750.6E
3. OTHER Preliminary Message 272336Z JAN
4. Supplementary Message 282135Z

OP-CSF

AIRCRAFT ACCIDENT REPORT

OPNAV FORM 3750-1A (Rev. 3-63) Page 3

SPECIAL HANDLING REQUIRED in accordance with

Para. 6a, OPNAV INSTRUCTION 3750.6, (Navy Aviation Safety Program)

OPNAV REPORT 3750-1

G. SHIPS DATA

1. EQUIPMENT INVOLVED ☐ CATAPULT ☐ ARRESTING GEAR	2. PRESSURE SETTING	3. WIND OVER DECK	4. RELATIVE WIND	5. APPROACH/ENG SPEED

6. NAVY NUMBER	7. MODEL NUMBER	8. LOCATION ON SHIP	9. LAUNCHING BRIDLE AND BRIDLE INSERTER

10. CATAPULT/ARRESTING GEAR BULLETINS OF NOTE CITED

11. This portion shall be completed whenever (1) an aircraft accident involves arresting gear barrier and/or launch equipment, or (2) an aircraft accident involves malfunctioning of arresting gear, barrier and/or barricade equipment. Incidents or routine damage to cables, weldings and other expendable equipment need not be reported herein.

ENGAGED	12A DECK RUNOUT (FEET)	12 RAM TRAVEL (INCHES)	14 CONTROL VALVE SETTINGS: CONSTANT PRESSURE DOME (P.S.I.)	RATIO	CONSTANT RUNOUT (WT. LBS.)	15 ACCUMULATOR PRESSURE (PSI)	16 COMMENTS (for cable failures specify no. landings and months in service)
DECK PENDANT							
DECK PENDANT							
BARRIER/ BARRICADE							

H. DEPLOYMENT

FOR ACCIDENTS ABOARD CARRIERS (complete on board)

1. DATE DEPLOYED (D-HR)	3. DAY HOURS/LANDINGS SINCE DEPLOYMENT	4. DAY HOURS/LANDING LAST 30 DAYS
2. NO. DAYS OPERATING PERIOD		
5. INST. HOURS LOGGED SINCE DEPLOYMENT ACTUAL/SIMULATED	6. NIGHT HOURS/LANDINGS SINCE DEPLOYMENT	7. NIGHT HOURS/LANDINGS LAST 30 DAYS

I. WEATHER

WEATHER AT SCENE OF MISHAP

1. CEILING	2. VISIBILITY	3. RELATIVE WIND DIRECTION AND VELOCITY	4. TEMPERATURE RUNWAY / OUTSIDE AIR	5. DEW POINT	6. ALTIMETER SETTING
Unlimited	3H	Light Variable	61	48	30.11

7. OTHER WEATHER CONDITIONS (cloud obscuring layer, sky cover, density altitude, as appropriate)

PART II ADDITIONAL INFORMATION

PART	SECTION	ITEM	REMARKS	COPY DISTRIBUTION
				2CC NASA/NSA/FCDA DIRECT (AAR)
				1CC BUWEPS DIRECT (AAR)
				1cc COMCVW-16
				1cc CO NAS Lemoore
				1cc COMFAIRALAMEDA
				1cc COMNAVAIRPAC
				1cc CO VA-122
				1cc CO VA-152
				1cc Directory Aerospace Safety, Norton AFB.

COST DAMAGE TO	3. GOVERNMENT PROPERTY	4. PRIVATE PROPERTY	5. DATE SUBMITTED TO CO
	None	None	16 Feb 1967

PART IV SIGNATURES OF THE BOARD

1. SENIOR MEMBER	2. MEMBER	3. MEMBER
LCDR (b) (6) [redacted] VA-152 ADMIN OFFICER UNIT BILLET	LT (b) (6) [redacted] VA-122 LINE OFFICER UNIT BILLET	LT (b) (6) [redacted] CVW-16
3. FLIGHT (b) (6) [redacted] LT (b) (6) [redacted]		LT (b) (6) [redacted] VA-152 SAFETY OFFICER UNIT BILLET

* When preparing Incident and Ground Accident reports, items indicated by an asterisk in the upper right hand corner must be filled in. Other items considered appropriate should also be filled in.

OP-03F

PART V

THE ACCIDENT

On 27 January 1967, at approximately 1130U, LT ZAMBORI departed NAS Alameda for NAS Lemoore in a Lemoore Beechcraft. His purpose was to return A-1H BUNO 139728, AH 501, to VA-152 at Alameda. 501 had made an emergency landing at Lemoore on 10 January, with a rough running engine. NAS Lemoore AMD had found that the number 10 cylinder had ingested its exhaust valve, and had changed the number 10 cylinder assembly (Encl 17) and advised VA-152 that the aircraft was ready for flight.

17 da. A/C Lemoore

By approximately 1245U on the 27th., LT ZAMBORI, a qualified test pilot, had arrived at Lemoore AMD, picked up the maintenance records, and filed a VFR operational test flight to NAS Alameda (Encl 18). Start, taxi, and engine run-up were apparently normal and LT ZAMBORI requested clearance for take-off. At 1323U he was cleared, and departed from runway 32 Right. Four minutes later he contacted Lemoore tower informing them that he had a fire and an engine failure.

Initial sighting by ground and tower personnel placed 501 over the North end of runway 32R heading approximately 120°M at an altitude of 1500 feet AGL (Encl 33). At that time, the pilot's stated intentions were to make an emergency landing on 32R. Realizing that he would not be able to make the approach end of 32R, the pilot called for, and was cleared for, a mid field landing. Passing through the 90° position 501 was observed to increase its sink rate. Impact with the ground occurred at the 45° position, slightly nose down, approximately 15° right wing down. As the aircraft came to rest, witnesses saw a fireball and explosion which diminished rapidly to a small amount of gray smoke. Crash and rescue had been alerted, and were proceeding to the scene. Their movements were hampered by the soft dirt and mud which they encountered when not on prepared surfaces (Encls 6,7,10). After Crash and Rescue had been unsuccessful in freeing the pilot, a helo and hoist were utilized to lift him free. The pilot was in the cockpit for approximately 15 minutes after impact and had been observed to be alive and conscious (Encls 7, 8, 9, 10). Death occurred after the crash as a result of asphyxiation and burns (Encl 1). The pilot was determined to be dead when removed from the cockpit, by the flight surgeon at the scene. (Encl 1).

The helicopter's down wash re-ignited the wreckage which burned fiercely until finally extinguished by the Crash Crew. NAS Lemoore provided security of the wreckage until the investigation of the wreckage was concluded.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

PART VI

DAMAGE TO THE AIRCRAFT

The aircraft struck the ground approximately 800 feet East of and 7000 feet from the approach end of runway 32R, NAS Lemoore, California. Initial contact was made by the main landing gear with sufficient force to drive two depressions one and one half feet deep into the ground (Encl 27). Secondary contact was by the starboard wing which separated at the root and left exact imprints of all Aero 14 outer wing racks in the ground. Both main landing gear and the port wing subsequently separated. General disposition of the wreckage is as indicated in enclosure (27), with the fuselage and engine coming to rest 150 feet West of initial impact. The aircraft shows no signs of having cart-wheeled, nor is there damage on the wing tips severe enough to indicate that the wings were sheared by contact with the ground. The board concluded that the wings separated as a result of excessive "G" loading at impact. The fuselage gives the same indication of high positive "G" loads. The upper engine mounts failed. The empennage, while still attached to the cockpit section, was twisted approximately 20° from the vertical axis of the aircraft, and was separated readily during salvage operations. Except for external fire damage, the engine was in good condition. Two prop blades were torn from the hub, and were found mid-way between initial impact, and the final resting point of the fuselage. The remaining blades were as shown, indicating that the power plant was developing little if any power.

The cockpit area showed severe impact damage on the port side. The rudder pedal and attaching arm were sheared off and jammed up behind the port side of the instrument panel. The panel itself was forced into the cockpit (aft) approximately one foot (Encl 28). The gages were severely damaged, some beyond the point of recognition. The gunsight along with a foot of it's mount, had been torn loose and was found in the cockpit.

Investigation of the controls revealed the following:

1. Fuel valve on main
2. Mixture rich
3. Prop full increase RPM
4. Carburetor air direct
5. Blower low
6. Fuel boost pump off
7. Throttle set at approximately 25" MAP
8. Battery - Generator switch on
9. Magneto switch on
10. Gear handle down
11. Flaps handle up
12. Speed brakes in

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Trim settings were 3 degrees right rudder, 3 degrees left wing down, and 1 degree nose down. Inspection of the aileron trim tab revealed that an undetermined amount of right wing down was in fact selected. Further, the horizontal stabilizer screw jack indicated 1± degree nose up trim. Although the indications were not wholly in agreement, the Board found no evidence of trim or control malfunction. It should also be noted that impact forces could have caused movement of the controls and indicators.

Although the accelerometer was recovered from the lower port side of the cockpit, it was not operable, and its condition was such that it gave no indication of the force of impact.

As indicated by enclosure (25), an intense fire resulted 15 to 20 minutes after the crash which destroyed the canopy and melted portions of the skin and cowling.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

PART VII

INVESTIGATION AND ANALYSIS

A. GENERAL. The investigation of the wreckage was begun on 28 January and, with ample assistance from NAS Lemoore and VA-122 personnel, was finished the same day. The primary items of interest noted while removing the engine were: (1) the throttle and mixture control linkages were intact; (2) the fuel line fittings leading aft from the main fuel strainer to the main fuel cell were less than finger tight and (3) the number 10 front exhaust pipe assembly, part number 427-998, was separated from the exhaust stack assembly part no. 525 8899 224. Questioning of witnesses and gathering of evidence were begun on 29 January. Due to the location of the crash, an abundance of material was gathered. The Board has attempted to present only that material which is significant and avoids repitition. Of particular note is the quantity and quality of the photography of the rescue efforts.

On 3 February the engine was shipped to O & R Alameda for priority DIR. Although the full DIR is not available, two of the Board Members were present during the disassembly and, coupled with the preliminary report, the Board has sufficient data to discuss the malfunction. The airframe is currently in custody of NAS Lemoore Aircraft Salvage.

B. PERSONNEL FACTORS.

1. Pilot factors. LT ZAMBORI's mental and physical condition prior to the accident were apparently good. He was under no known medication, nor had he made mention of any physical complaints. The Board considers that it is extremely unlikely that LT ZAMBORI had had any alcoholic beverages during the morning. He had not been out with any of the squadron members the preceding night, nor had any visited him. Inasmuch as the Board did not wish to disturb Mrs. Zambori with questions as to his habits or food intake over the previous day or two, it can only be assumed that he had a sound night's sleep and had eaten properly prior to the crash. LT ZAMBORI appeared to have no financial, domestic or emotional problems.

Questioning of squadron pilots reveals LT ZAMBORI to be a competent pilot. He did exhibit a tendency toward not being able to accept constructive criticism or well-meant instruction, occasionally having a reluctance to learn from the experience of others. He also tended to disregard those portions of NATOPS which he thought of little consequences to himself. As such he occasionally exhibited a certain amount of sloppy airmanship. He could have consistently and occasionally did, demonstrate excellence in flight. He certainly had enough experience in type. What problems he had were in mental attitude.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

The Board feels the foregoing to be necessary in order to arrive at any logical analysis of the pilot's motivation for his actions during the last two minutes of flight. That a fire had occurred in flight with an associated power loss is established. The pilot obviously recognized his plight. While the Board would prefer not to be in the position of a Monday morning quarter back, there was more than one course of action open to the pilot. Whether any of the alternatives would have saved his life is open to debate, but there appear to be several errors in pilot judgement involved. First, having recognized engine fire, the initial decision is whether to shut off the fuel supply hoping to extinguish the fire, or to bailout. An understandable reluctance on the part of A-1 operators to bailout prevailed and the pilot elected to remain with the aircraft. Why he did not secure the engine, landing straight ahead if necessary is open to conjecture. Second, having reached gliding distance to the field, a landing on 14L could very likely have been effected. Certainly wind direction or velocity was no problem. As indicated by enclosure (5), a flight of A-4's was abeam taxiway C some 3000 feet along in their take-off roll and could have cleared the runway to the left after lift-off. Finally, after it became apparent that he was not going to make the runway, there was still one final alternative, i.e., gear up and land straight ahead. From enclosures 3 and 5 and wreckage investigation, it is evident that the pilot tried to stretch his glide and was entering a stalled condition with associated high sink rate when he struck the ground.

After analysis of the testimony and evidence as well as personal knowledge of the pilot, the Board reached the following general conclusions:

(1) If the pilot cannot be charged with an initial error in judgement, he must at least be questioned as to attitude, that of attempting to give an appearance of casualness (Encl 3) and tower tape) to a bona fide emergency. As such, he demonstrated ignorance of standard procedures, or through emotional stress became fixed upon a single goal to the exclusion of alternatives.

(2) The pilot must be assigned one major error in judgement. With insufficient altitude and airspeed to make a prepared surface, there is but one course of action. The Board can only surmise why the pilot was so persistant in his attempt to reach 32R, but it is felt that emotions rather than reason dictated his actions. Whether through last minute panic, rejection of the seriousness of the situation, or failure to realize the probable consequences of his actions, the pilot attempted to push the aircraft beyond its capabilities.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

2. Maintenance, Servicing and Ground Handling Factors: No servicing or ground handling factors contributed to the accident, except as noted in paragraph C. below.

3. Supervisory Factors: No supervisory factors contributed to the accident.

C. Material Failures Or Malfunctions:

1. As indicated by enclosure (32), the cause of power loss was fire between nos. 9, 10 and 11 cylinders due to separation of no. 10 front exhaust pipe assembly (P.N. 427-998) from the exhaust stack assembly (P.N. 525 8899-224). This caused the intake pipe (P.N. 138713N2) to nos. 9 and 10 cylinders to burn through with subsequent ignition of the fuel air mixture. The loose fitt ngs on the main fuel strainer were not thought to be significant. There was no evidence of excessive heat either on the strainer or on the fire wall. The looseness could be accounted for by the severity of impact. Examination of the engine revealed the following:

(1) Enough heat had been generated to melt the push rod housing of no. 9 intake rod and no. 11 exhaust rod. Torching was in evidence by melted baffles on the intake side of no. 9 exhaust side of no. 11 and the center rear of no. 10 cylinders. The front intake pipe assembly (P.N. 1428194) was completely consumed.

(2) A portion of the molten aluminum thus generated had been ingested into nos. 9 and 10 cylinders, as evidenced by the scraper ring. A lesser amount was also found on the scraper rings of nos. 11 and 12 cylinders. Traces were found in all other cylinders. From this, the Board feels that the fire was at some point sucked back into the impeller and subsequently forced through the entire intake system.

(3) Numerous fine aluminum particles were found in the oil system although no wear could be found in the engine. It is presumed that these were generated by the exhaust valve failure in no. 10 cylinder which was changed at NAS Lemoore OMD, enclosures (16 and 17). Although not directly related to the accident, the Board feels that the engine should have been changed, rather than just the cylinder. While GREB 202 states in part that "Complete failure.....of a valve to the extent that the resultant damage to the piston shows evidence of pounding by a large portion of the valve shall be sufficient cause for the removal of the engine....", it also leaves some room for interpretation by stating "minor piston damage shall be cause for replacement of the cylinder only." Until such time as sufficient data is obtained to settle the issue of what is minor vs. what is pounding and what is the likelihood of resultant rod or bushing failure, the Board feels that liberal interpretation of GREB 202 should be discontinued, particularly in single engine aircraft.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

(4) All accessories, pumps, linkages, etc., were found to be intact and operable. The propellor blade angle was determined to be 27.75° (full increase RPM) and the throttle cracked at about 30-35 inches, although subject again to error due to impact. The drive shaft for the front sump was sheared, probably at impact and is not considered significant.

2. Although the presence of fire and power loss were clearly established, the Board is unable to determine whether complete power failure occurred. The Wright Representative at NAS O & R Alameda, Mr. Ted Kent, after talking with the factory, would only state positively that power loss of 10-15% would occur with an intake fire. If, as seems likely, the fire was drawn into the supercharger, the very best that could be expected would be severe power loss and associated back fires. The Board is unable to account either for the absence of smoke or flames as described by witnesses, or for the evident complete power failure. Further, the Board was unable to determine the reason for the separation of the exhaust stacks. One of the clamp assemblies, P.N. 2261954, was severely damaged by impact, and the retaining bolt was lost. Either the stack separated in flight due to material failure or was installed improperly. Since the assembly must be removed when changing the cylinder, there was some doubt as to whether or not the exhaust stacks were properly mated. Since investigation of statements and documents relating to the cylinder change show compliance with existing directives and inspection requirements, and since all other brackets and clamps associated with the exhaust system for the no. 10 cylinder were found to be properly installed, the Board discounted maintenance personnel error as a factor.

D. FACILITIES: The third major factor in the accident was the rescue operation. From the start it should be noted that the Board has nothing but the highest praise for the attitude of all of the Crash Crew members interviewed. Their desire to successfully extricate the pilot is evidenced by the fact that five members of the crew were either overcome by smoke or burned. Since the pilot did survive the crash only to die of asphyxiation and burns later, the Board investigated the rescue attemps quite thoroughly. From questioning witnesses and wreckage investigation the following facts were established.

1. After impact and prior to any rescue attempt, the pilot took off his hardhat and undid his lap belt. It was ascertained that the pilot had his hard hat on prior to impact, since an impression of the gun sight ratchet for changing the reticle shows clearly on the front of the sunvisor cover. (It will be recalled that the gun sight was discovered loose in the cockpit). Further examination of the hard hat shows no evidence of any fire damage. The Board assumed therefore that little if any fire was present in the cockpit prior to impact.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

1. Initial rescue efforts were unsuccessful due to excessive heat and smoke emanating from the cockpit area and because the pilot was evidently held in the cockpit. Rescuers state that they could lift the pilot approximately 8-10 inches (Encls 6-10, 12 and 13). They also state that the lap belt had been released. There was apparent confusion as to whether his parachute shoulder straps were attached or not. Close questioning of the Crash Crew revealed further confusion as to where and how many fittings are required to be released in order to free a pilot from his parachute. It should be noted however that procedures do not call for release of the parachute and that the Crash Crew to a man feels confident they can extricate a pilot with his chute on. There was no evidence of any binding or tearing on the chute. The seat pan was intact with no apparent deformity to hold the parachute in the cockpit.

3. As can be seen by the sequence of photographs, it became necessary to put out the developing fire, a job which was hampered due to two of the three trucks becoming mired in mud. It was noted that with one truck on the scene, it would be stationed ahead of the aircraft. From that position, little if any foam can be directed into the cockpit. Within about 10 minutes most of the external fire had been brought under control. There was still intense heat in the cockpit with associated smoke.

4. The pilot was finally lifted free of the cockpit by use of the station helicopter with no appreciable difficulty. By this time however, the pilot was dead (Encls 1 and 11).

5. From the cockpit wreckage, the Board feels that the most probable cause of the Crash Crew being unable to free the pilot was a portion of the instrument panel pinning his left leg. The Board conducted several experiments and found that an individual seated in a cockpit whose lower leg is fastened in place could raise himself about 8 inches, regardless of how the chute is attached.

6. Other areas of investigation revealed that those Crash Crew members who were wearing asbestos suits had difficulty seeing once foam got on their visors. Others mentioned the slippery surfaces due to the foam. The Board found that there have been similiar instances of crashes off prepared surfaces in which crash vehicles have been slowed or stopped by the terrain. Even in the summer months the same problem exists. Irrigation in the area can turn an otherwise passable field into a mud flat.

The Board has found no evidence to suggest that any remedial action has been taken in connection with previous recommendations to equip the Crash Crew with vehicles able to operate effectively in mud.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

E. NATOPS. NATOPS procedures and requirements are not considered to be a factor in this accident. It is felt that disregard of the Emergency Section of the Manual very probably cost the pilot his life. No changes or additions to NATOPS are considered necessary as a result of this accident.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

PART VIII

CONCLUSIONS

The primary cause of the accident was separation of the exhaust system for the number 10 cylinder between the front exhaust pipe assembly and the exhaust stack assembly. While not completely discounting maintenance personnel error, the Board feels that separation was caused by malfunction of the clamp assembly, part number 2261954, probably associated with the missing retaining bolt.

Secondary factors affecting the accident were:

1. Pilot error in judgement.

2. Inability of the Crash Crew to effect prompt rescue.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

PART IX

RECOMMENDATIONS

1. Once again this particular accident points up the need for continual emphasis on all levels that the only preventive measures to avoid such needless loss of life are to have emergency procedures ingrained so thoroughly that correct application becomes almost a conditioned response.

2. It is imperative that every effort be made to secure crash vehicles suited for travel through mud by NAS Lemoore, or navy-wide if this problem is common to more than this particular area.

No comments

3. It is suggested that a light weight oxygen breathing apparatus be procurred for use by crash and rescue personnel. Such equipment should be small enough to fit under existing asbestos suits, or the suits should be modified.

4. It is felt that the training of Crash Crew personnel should be reviewed and if necessary revised to insure that all crew members are familiar with the location of all harness and parachute fittings used in military aircraft.

5. Although not directly applicable to this accident, it is recommended that CREB 202 be reviewed and that engine changes vice cylinder changes be required for any single engine aircraft which ingests a valve regardless of damage.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

VA-152 AAR 1-67A, A1H BUNO 139728, ACCIDENT OF 27 JANUARY, 1967, PILOT ZAMBORI

INDEX

LIST OF ENCLOSURES

1....Medical Officer Report (Original only)

2a...Rescue Report (Original only)

2b...Rescue Report (Original only)

3....Statement of CDR (b) (6) [redacted] Witness

4....Statement of LT (b) (6) [redacted] Witness

5....Statement of ACI (b) (6) [redacted] Tower supervisor

6....Statement of Assistant Fire Chief (b) (6) [redacted] Witness

7....Statement of (b) (6) [redacted] Witness

8....Statement of [redacted] Witness

9....Statement of [redacted] Witness

10...Statement of (b) (6) [redacted] Witness

11...Statement of LT(MC) (b) (6) [redacted] Witness and Flight Surgeon

12...Statement of HM2 (b) (6) [redacted] Witness

13...Statement of HM2 (b) (6) [redacted] Witness

14...Statement of AM (b) (6) [redacted] Helo Hoist Operator

15...Transcript of NAS Lemoore Tower Tape

16...Statement of LT/G (b) (6) [redacted] VA-152 Maintenance Officer (Acting)

17...Statement of LCDR (b) (6) [redacted] OMD Officer, NAS Lemoore

18...Flight Plan of A1H BUNO 139728

19...Resume' of Pilot Flying Experience

20...Photograph-Wreckage and fire approximately 4 minutes after impact

21...Photograph-Approximately five minutes after impact

22...Photograph- Approximately eight minutes after impact

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

23...Photograph- Approximately thirteen minutes after impact

24...Photograph- Approximately fifteen minutes after impact

25...Photograph- Reignition of fire by helocopter

26...Photograph- View of Wreckage after extinguishing of fire

27...Photograph- aerial view of crash site

28...Photograph- Throttle quadrant and port side of cockpit

29...Photograph- Starboard view of engine

30...Photograph- Front view of engine

31...Photograph- Port view of engine

32...Preliminary report of DIR

33...Flight Path Diagram

34...Film of Rescue Attempt (Original only)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

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ADDENDUM TO # 35 PAGE ONE OF THE M.O.R.

CONCLUSIONS AND RECOMMENDATIONS:

I. CONCLUSIONS

A. THERE WAS A MATERIAL FAILURE OF THE NUMBER 10 CYLINDER (EXHAUST SYSTEM)

B. A PILOT ERROR IN JUDGEMENT REGARDING THE CORRECT APPROACH TO MAKE AN EMERGENCY LANDING ON THE RUNWAY WAS A MAJOR FACTOR IN CAUSING THE CRASH.

C. THE INABILITY OF THE CRASH VEHICLES TO PROMPTLY REACH THE CRASH SITE BECAUSE OF MUDDY GROUND AND BECAUSE THE VEHICLES ARE NOT ALL EQUIPPED WITH PROPER TIRES WAS CERTAINLY A MAJOR FACTOR IN NOT BEING ABLE TO REMOVE THE PILOT IN TIME.

II. RECOMMENDATIONS

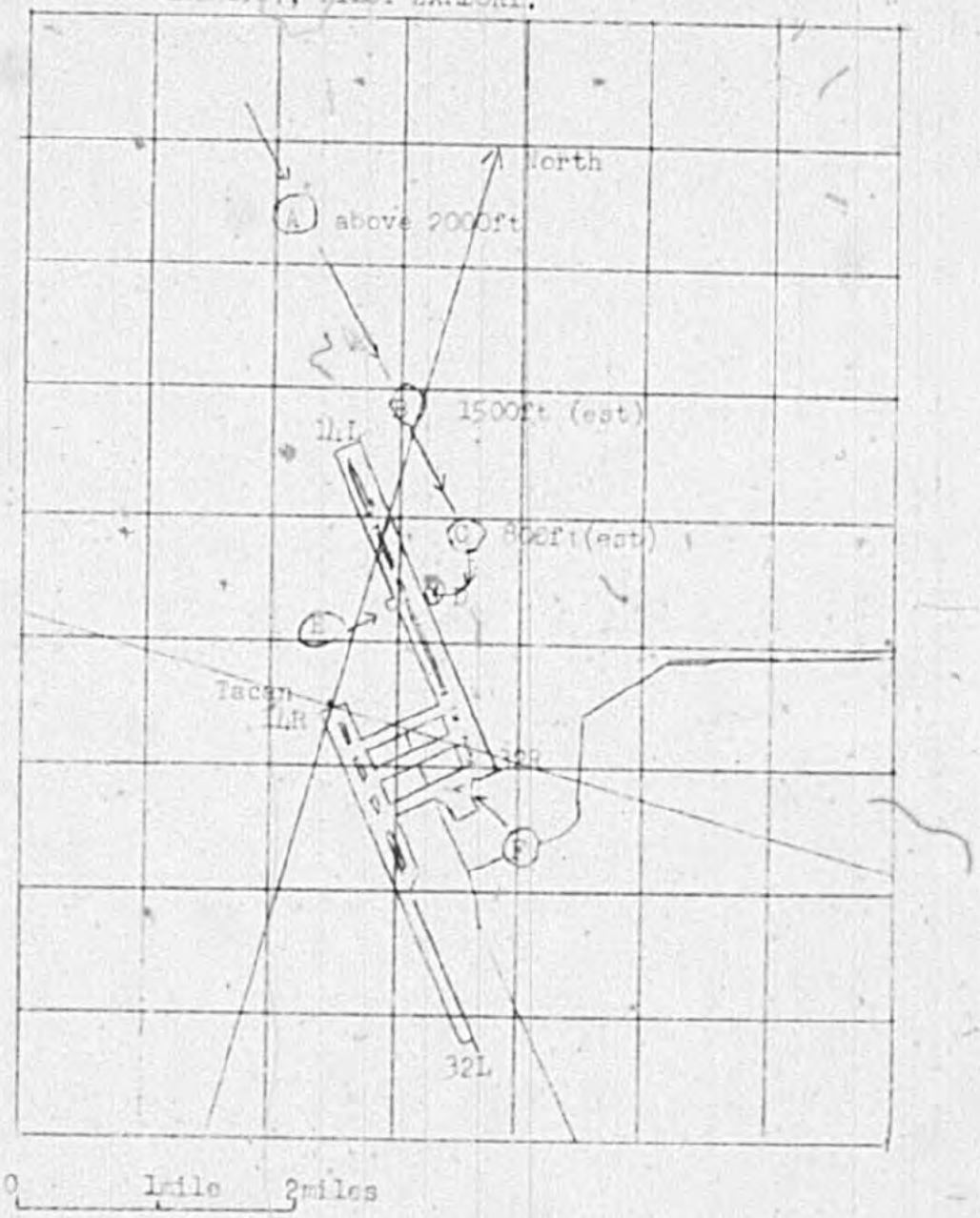
A. PROVIDE ALL CRASH VEHICLES WITH APPROPRIATE TIRES FOR OPERATION IN HEAVY MUD, PARTICULARLY IN AND AROUND THE N.A.S. LEMOORE AREA.

B. PROVIDE, AS STANDARD EQUIPMENT, SMOKE FILTRATION DEVICES BENEATH THE HOODS THAT FIRE-FIGHTERS WEAR.

C. PROVIDE INTENSIVE TRAINING FOR FIRE-FIGHTERS AND CRASH CREW MEMBERS IN THE EXTRICATION OF PILOTS FROM BURNING AIRCRAFT.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAV. INST. 3750.6E

FLIGHT PATH DIAGRAM OF AH5G1 BUNO 139728 ACCIDENT OF
27 JANUARY 1967, PILOT ZAMBORI.



A. Approximate initial call up point, 5½ minutes before crash.
B. Initial sighting by witnesses.
C. Approximate position at last transmission.
D. Crash site.
E. Hardstand position of Lemoore 12(alert MB-5)
F. Position of second alert MB-5

AUTHENTICATED

(b) (6) [redacted]

LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

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RESCUE REPORT

OPNAV FORM 3750-13 (3-63)

SPEC[redacted] HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINS[redacted]750.6E
INSTRUCTIONS: SEE REVERSE

OPNAV REPORT SYMBOL 3750-14

1. FROM: NAS Lemoore Operations		2. DATE OF MISHAP: 27 Jan 67	2A. DATE OF RESCUE: 27 Jan 67
3. LOCATION AND DUTIES OF RESCUE VEHICLE: NAS Lemoore		4. RESCUE VEHICLE (Type/model): UH2	
5. NUMBER OF PERSONNEL: 5A. IN RESCUE VEHICLE OR ON RESCUE TEAM: 3	5B. TO BE RESCUED: 1	5C. RESCUED: 1	6. RESCUE BACK UP MEANS: Field Ambulance

7. TIME SEQUENCE OF EVENTS (Local Date Time Group)

7A. Alert Received: 1329	Method: NAS Lemoore Tower
7B. Vehicle Departed: 1334	Distance to Scene: 1½ Miles
7C. Arrived on Scene: 1335	Search Required: No
7D. Located Survivor: 1335	Method of Locating: Visual
7E. Began Retrieval: 1345	What Was Sighted First: A/C Wreckage
7F. Ended Retrieval: 1348	Subsequently:
7G. Survivor(s) Disembarked: 1353 (DOA)	Location (If different from Item 3): NAS Lemoore Hospital

8. WEATHER CONDITIONS AT RESCUE SITE

8A. WATER TEMPERATURE	AIR TEMPERATURE	WIND VELOCITY
°F	64 °F	Calm

8B. SEA STATE/WAVE HEIGHT/FREQUENCY, TERRAIN DESCRIPTION

Terrain: Flat, Muddy

9. EQUIPMENTS ACTUALLY USED DURING RESCUE

Crashcrew Personnel
Helicopter Hoist

10. DIFFICULTIES ENCOUNTERED (List all difficulties and effect on final outcome of rescue attempt, i.e., ALERTING PERIOD, SEARCH/LOCATING, RETRIEVING, POST-RETRIEVAL)

Difficulties were encountered by the crash crew that first arrived at the scene. A full report will follow in the complete AAR.

11.

PERSONNEL REQUIRING RESCUE (NAME-LAST FIRST INITIAL)	GIVE REASON FOR RESCUE	FACTORS COMPLICATING RESCUE ATTEMPT (Physical condition, ignorance of equipment, sea state, etc.)
ZAMBORI, Donald P.	Pilot - A/C Accident	Physical Condition, Fire, Entrapment within cockpit

12. REMARKS: (Training of rescue team or crew, communication equipments/techniques, retrieval equipments/techniques, rescue vehicle)

Full report will be included in AAR.

13. ATTACH ENCLOSURES: Narratives of search, location and retrieving—Survivor's statements

14. NAME AND TITLE OF SUBMITTING OFFICIAL: LCDR (b) (6) [redacted], Helicopter Pilot	SIGNATURE OF SUBMITTING OFFICIAL: (b) (6) [redacted]
15. NAME AND TITLE OF FORWARDING OFFICIAL: LCDR (b) (6) [redacted], Senior Member Accident Board	SIGNATURE: (b) (6) [redacted]

OP-03F

AIRCRAFT FIRE/RESCUE REPORT
NAVWEPS FORM 11135/1 (8-60)

NO TRANSMITTAL LETTER REQUIRED

REPORT SYMBOL BUWEPS 11135-1

STATION AND LOCATION: U. S. Naval Air Station Lemoore, California	DATE OF REPORT: 27 January 1967	AFRA NO: 05-67
	DATE AND TIME OF INCIDENT: 27 January 1967 1328	ON STATION: X / OFF STATION:
REPORTING CUSTODIAN: VA-152	MODEL AIRCRAFT INVOLVED: A-1-H	BUREAU NO: 139728

TO: Chief, Bureau of Naval Weapons (SEED) SFM

VIA: MILITARY COMMAND: ComFair Alameda

SIGNATURE:

EXACT LOCATION OF INCIDENT: 600' From Outboard side of Runway 32-Right, Between 6000 & 7000' Marker Toward Roll Out End in Dirt & Mud Field.

TYPE OF INCIDENT						FIRE INVOLVED		ESTIMATED CASE
TAKE-OFF		LINE OR LOADING		FUELING		YES	X	
LANDING	X	PARKED		MAINTENANCE		NO		
TAXIING		DEFUELING		INFLIGHT	X	IMPACT IGNITION	X	
OTHER (Specify)						DELAYED IGNITION		

CONDITIONS AT TIME OF INCIDENT

GENERAL WEATHER PICTURE			NATURE OF TERRAIN AT AND IN APPROACH TO INCIDENT
Unknown Overcast Haze-Ceiling Unlimited	WIND DIRECTION	150 T.	Dirt Field
	WIND VELOCITY (mph)	2-4 Knots	
	TEMPERATURE (°F)	64	

LIQUID FUEL QUANTITY

		OTHER FUELS
ESTIMATED ON BOARD BEFORE INCIDENT (lbs)	2280	None
ESTIMATED ON BOARD AFTER INCIDENT (lbs)	NONE 2000- Correction	
ESTIMATED SPILL AREA (Size in feet)		

PERSONNEL RESCUE

		DESCRIBE RESCUE METHODS USED
NO. PERSONNEL ON BOARD AIRCRAFT	1	See full story on Incident Report
NO. PERSONNEL SURVIVED	0	
NO. PERSONNEL ESCAPED UNAIDED		
NO. PERSONNEL RESCUED		

FIRE FIGHTING

FIRST METHOD OF ALARM USED						TIME RECORD	
TWO-WAY RADIO		EMERGENCY INTER-COM		EMERGENCY PHONE	X	TIME ALARM RECEIVED	1328
OTHER METHOD (State)						TIME EQUIPMENT ARRIVED	1332

STATION EQUIPMENT

EACH EQUIPMENT AVAILABLE AT INCIDENT		NO. PERSONNEL MANNING EQUIPMENT		QUANTITY EXTINGUISHING AGENTS USED	
TYPE	NO. LOADS USED	MIL.	CIV.	FOAM (gals. conc. used)	OTHER TYPES AND QUANTITIES
Rescue			1		400# PKP, 1-15Lb CO'2
4-MB-5	6	1	15	150 Gals.	6-30# PKP
1- P/U			2		1-30# PKP 1-15Lb CO'2
R/W Foamer		1			
Struct/Pumper			1		

STATION EQUIPMENT OUT OF SERVICE

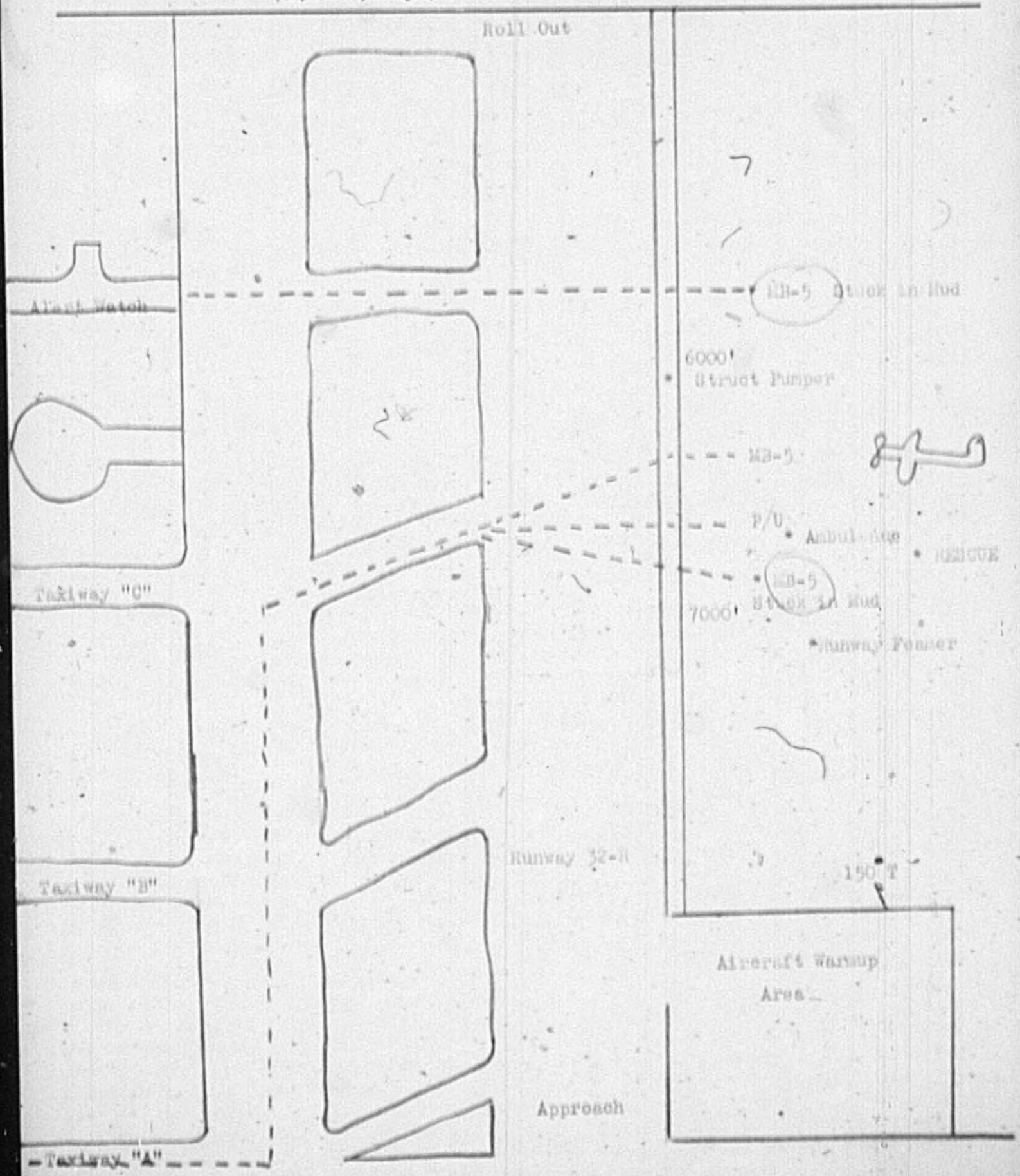
TYPE	DEFICIENCY	NO. OF DAYS	EXPLAIN DELAYS TO REPAIR
Nurse	Fuel Pump Out	1	Ordering New Pump
MB-1 845	At Public Works at time of Incident having right rear tire replaced.		
06-Cardox	None		Lack of Personnel
			Certified to be a true copy
			(b) (6) [redacted]

(b) (6) [redacted] USNR

(b) (6) [redacted]

ENCLOSURE(2b)

DIAGRAM OF INCIDENT SHOWING WIND, DIRECTION, APPROACH OF EQUIPMENT, POSITION OF AIRCRAFT, DISTANCES, ETC.
(Maps and photographs should be included, if significant)



FULL DESCRIPTION OF FIREFIGHTING OR PROTECTION AT INCIDENT

At 1328 on 27 January 1967, we were notified via Primary Crash Phone that an A1-7, VA-152, BUNO 139728, Landing Runway 32R with fire and engine failure, 2 miles north of airfield at this time. All crash equipment responded. While enroute on Taxiway "A" to the emergency the aircraft was trying to make an east side approach to runway 32R, at approximately the middle of the runway. At approximately 1330, the aircraft crashed in a dirt and soft field on the outboard side of the runway approximately 600' from the roll-out end of 32R. Upon impact the aircraft started to burn slowly, visibly seen internally and around the cockpit section.

The alert watch MB-5 truck at the hardstand in responding to the crash scene got stuck in the soft ground after leaving the hard surface east of 32R. Crewmembers from the Alert Watch MB-5 stuck truck proceeded to the scene afoot carrying portable hand extinguishers from truck. At 1332 the Duty Assistant Fire Chief, Fire Captain and crewmembers from the stuck alert watch truck arrived at the crash scene at approximately the same time. By this time the fire had gained considerable momentum, principally around and in the cockpit area. The pilot was still in the aircraft upon arrival.

Rescue attempt was made, but unable to be completed at this time because of intense heat, smoke and because for some unknown reason the pilot could only be lifted slightly out of his seat because of some obstruction or binding within the lower cockpit section.

The 2nd MB-5 responding from the crash station managed to proceed through the muddy ground to the crash scene, and the truck immediately went into operation foaming aircraft and fresh crewmembers attempted rescue. Due to fire and smoke concentration within floor of cockpit area, rescue personnel were being overcome by smoke and heat and rescue could not be made at this time.

The 3rd MB-5 which was directly behind the 2nd MB-5 and was proceeding to the scene, got stuck in muddy ground immediately after leaving hard surface. This truck was pulled from the muddy ground by an MB-1 crane and took a new route and proceeded to the scene. By this time the first MB-5 truck at the scene had run out of foam and the fire was still uncontrolled with internal burning. Rescue of the pilot had not been completed.

The 1st MB-5 at the scene was returned to quarters to replenish with foam and water. The 2nd MB-5 truck at the scene held the fire under control while the station helo hovered over the aircraft and using the helo collar sling removed the pilot from the cockpit. While sling rescue was being made the downdraft from the helo's rotors caused the fire to reignite. The 2nd MB-5 used the balance of its foam trying to control the reignition caused by the helo rotors.

At this time the MB-5 alert watch truck was pulled from his stuck position in the muddy ground and proceeded to the scene and continued to extinguish the reignition and was immediately supported by the 1st MB-5 arriving back at scene.

Due to the reignition being fed by fuel from the aircraft, the hoselines from the rescue truck airlift dry chemical unit were put into operation to support the 2nd MB-5's for total extinguishment.

By 1445 all apparatus and crews in quarters except 1 MB-5 truck standing by at scene as a precautionary measure in case of reignition.

(b) (6) [redacted]

Assistant Fire Chief

by direction

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[redacted]

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TRANSCRIPT OF NAS LEMOORE TOWER TAPE CONCERNING THE ACCIDENT OF AIH BUNO 139728 OF 27 JANUARY 1967, PILOT ZAMPORI

NOTE: TIMING STARTS WHEN TAKE OFF CLEARANCE RECEIVED

MIN	SEC		
00	00	Tower	AH 501 wind 110 degrees at 3. Cleared for take off.
		AH 501	501 (Landing and departure instructions to other aircraft)
03	45	AH 501	(ah) Lemoore Tower (ah) AH 501. I have a fire----engine failure.
		Tower	AH 501 Lemoore Tower roger, say your position please.
04	00	AH 501	(ah) 501 is (ah) about two miles to the north. I'll make a 180 low key on runway 32 right.
		Tower	501 roger (ah) report low key on runway 32 right. Lemoore altimeter 30.13. Understand 2 miles north and you have a fire and an engine failure. Is that correct? Over.
04	23	AH 501	Affirm
		Tower	501 roger. Caution have two jets departing at this time, and your estimate to the field, please.
		AH 501	(ah) Say again.
		Tower	What is your estimate to the field, please?
		AH 501	(ah) I'm estimating the field in about (ah) -----I'm over the north end of runway 32 right at the present time at 2000 feet.
04	50	Tower	AH 501 roger. Have you in sight. Continue approach, over.
		Tower	(Instructions to other aircraft to maintain radio silence.)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

MIN	SEC		
05	15	AH 501	(ah) I'm going to have to land halfway down the runway. (ah) I'm turning in on final now.
		Tower	501 roger. Wind 120 degrees at 3. Cleared to land Report your gear.
		Heardstand crash truck on 32R	------emergency landing at the runway?
05	45	Tower	Understand runway 32 right. Lemoore Tower The A1 has a fire and an engine failure. Roll on him.
05	50	Tower	Lemoore Red, Tower. The aircraft crashed on the field adjacent to the quad, over.

AUTHENTICATED

(b) (6)

[redacted]

LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 5750.6 SERIES

ENCLOSURE (15)

STATEMENT OF LTJG (b) (6) [redacted] USNR, (b) (6) [redacted] 1315, ATKRON ONE FIVE TWO AIRCRAFT MAINTENANCE OFFICER (ACTING), NAS, LEMOORE, CALIFORNIA, CONCERNING THE ACCIDENT OF A1H BUNO 139728 ON 27 JANUARY 1967, PILOT ZAMBORI.

The following maintenance history is submitted concerning A1H BUNO 139728. Information was obtained from the Aircraft Log Book, Maintenance Control Register, Maintenance Action Forms, Yellow Sheet Discrepancy Records and personal interviews with squadron personnel.

A1H BUNO 139728 was accepted from NAS, Alameda on 31 January 1966 with 3880.9 hours since Navy acceptance. It had accumulated 4067.4 hours at the time of the crash. The power plant, R3350-26WD, serial number W531090 was received installed on 139728. At the time it had 2846.0 hours since new and 21.4 since overhaul which had occured in September 1963 at NAS, Norfolk. The engine was installed on 139728 in July 1965 by NAS, Quonset Point O&R. At the time of the crash, W531090 had 3491.5 hours since new and 707.9 since overhaul.

The following checks were performed on the engine by the squadron; Acceptance - 31 January 1966, Second Calendar Major - 11 March 1966, Third Calendar Major - 8 June 1966, Fourth Calendar Major - 14 September 1966, Fifth Calendar Major - 27 December 1966. All discrepancies discovered during the fifth calendar major check and during post flight O.C. and test flight had been corrected.

Recent VA-152 Yellow Sheets and NAF Discrepancy Records applicable to the accident follow:

DATE	DISCREPANCY	CORRECTIVE ACTION
15 SEP 66	Take-off map 58"	Throttle gate stop adjusted-gripe not repeated
26 SEP 66	Intermittant smoke puffs, lower port stacks	Checked on decks, negative results-gripe not repeated
27 DEC 66	Take-off RPM 2900 settled to 2830	Checked fluid level in prop drained same, turned A/c checked OK.
28 DEC 66	T.O. RPM 2850	Reset to 2795
29 DEC 66	T.O. RPM 2920 2880 at 40" MAP	Reset to 2793
10 JAN 67	Rough running engine, emergency landing at NAS Lemoore	Number 10 Cylinder changed at OMD, NAS Lemoore

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

No cruise performance analysis available for months of December and January.

In general, aircraft and engine maintenance history as well as pilot and maintenance personnel opinion indicated a good aircraft.

(b) (6)

[redacted]

"SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 66, OPNAVINST 3750.6 SERIES."

STATEMENT OF LCDR (b) (6) [redacted] 1352, OMD OFFICER, NAS LEMOORE, CALIFORNIA, CONCERNING THE AIRCRAFT ACCIDENT OF A1H BUNO 139728, WHICH OCCURED 27 JANUARY 1967, PILOT ZAMBORI.

On Wednesday 11 January, 1967, Operations Maintenance Division of NAS Lemoore received A1H BUNO 139728 from VA-122 with information that it had a rough running engine. VA-122 personnel had determined that both spark plugs on number ten cylinder were peened.

Magnetic sump plugs and oil strainers were removed to check for metal. No metal contamination was noted. All spark plugs were removed and all cylinders were borescoped. The exhaust valve on number ten cylinder was found to be missing. Some small particles were found remaining in number ten cylinder. The piston and cylinder remained intact, and in accordance with CREB 202, part I, were considered to have sustained minor damage. During removal of the cylinder, the oil transfer line from the lower cylinder drain line was found to be cracked. This line with associated gaskets and packing was replaced.

A new cylinder assembly was obtained and during the installation the bottom oil scraper ring was broken. Another new cylinder assembly was obtained, but the oil scraper ring of this assembly was also broken as the rings were being compressed by the ring compressor. No additional complete cylinder assemblies were available. In order to expedite the repair, an additional oil scraper ring was obtained directly from O and R at NAS Alameda by NavAir Systems Command Representative Pacific at Lemoore. The cylinder assembly was installed in accordance with NWO2A-35JP-502.

The engine was pre-oiled in accordance with MRC number 20. An oil leak at the inter-cylinder drain-line to the front sump was discovered on turn-up and repaired. All engine indications were normal on this turn-up and each turn-up thereafter. A second low power turn-up was made after the oil leak repair prior to the aircraft being moved to the high power turn-up spot. A thorough high power turn-up was made. A full power check was performed three times. The aircraft checked out good, and was returned to the OMD line, and re-fueled.

On 27 January, 1967, the aircraft was preflighted and a daily inspection was performed by OMD personnel. The pilot was briefed concerning the work done on the aircraft and informed that this would be a test flight.

To the best of my knowledge, this aircraft was ready for flight.

(b) (6) [redacted]

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ENCLOSURE (17)

MILITARY FLIGHT PLAN

AIRCRAFT UNIT OF ASSIGNMENT/FROM LOCATION: VA 152 NAS ALAMEDA

AIRCRAFT SERIAL NO.: 139569

AH501	A1/B	170	DEPARTURE TIME: PROPOSED 2130 Z	ACTUAL

NAS LEMOORE

6500

	ROUTE OF FLIGHT	TO	ETC/ETA
✓	~~D~~ →	ALAMEDA	0+45

REMARKS: ① 15 MIN DELAY OVER NAVY CROWS -

—	—

4+30	150	MOFFET	0+40	

STD	(b) (6) [redacted]		DATE 1/27/67

CREW/PASSENGER LIST

	NAME AND INITIALS	GRADE	SERVICE NO.	ORGANIZATION AND LOCATION
	ZAMBORI D.P.	LT	(b) (6) [redacted]	VA-152 ALAMEDA

'67 JAN 27 PM 12:59

BRIEFING VOID 2200Z

FLIGHT AS PLANNED IS CERTIFIED VFR WITH NO DANGEROUS WEATHER ENROUTE. VERBAL BRIEFING GIVEN.

(b) (6) [redacted]

DUTY FORECASTER

PILOTS PREFLIGHT CHECKLIST

TOTAMS	NIGHTPACK RESTRICTIONS	AIRCRAFT/DESTINATION MAY AIDE
WEATHER AND WINDS	CHARTS	DD FORM 365F (Weight and Balance Clearance Form F)

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

ENCLOSURE(18)

FORM NO. 175 PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

RESUME OF PILOT FLYING EXPERIENCE OF LT. DONALD P. ZAMBORI, CONCERNING A1H BUNO 139723 OF 27 JANUARY 1967.

FISCAL YEAR	COMMAND ATTACHED	A/C MODEL	FLT HOURS	CF LDGS DAY/NIGHT	OPERATIONAL PROFICIENCY
1963	CHARTRA	T28B	155	0/0	OPERATIONAL
		A1H/J	98	0/0	OPERATIONAL
		T1A	2	0/0	OPERATIONAL
		T45J	4	0/0	OPERATIONAL
1964	VA122	T28B	17	0/0	OPERATIONAL
		A1H/J	83	13/6	OPERATIONAL
	VA-152	A1H/J	49	0/0	OPERATIONAL
	VA-128(RAD)	TF9J	25	0/0	OPERATIONAL
1965	VA-152	A1H/J	408	70/29	OPERATIONAL
1966	VA-152	A1H/J	462	67/39	OPERATIONAL
		A3B	2	0/0	OPERATIONAL
		S2E	3	0/0	OPERATIONAL
1967	VA-152	A1H/J	222	41/24	OPERATIONAL

AUTHENTICATED
(b) (6) [redacted]
(b) (6) [redacted] USN

"SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 66, OPNAVINST 3750.6 SERIES"

ENCLOSURE (19)

ENCLOSURE (20) VA-152 AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI
INITIAL PHOTOGRAPH. ESTIMATE 4 MINUTES AFTER IMPACT. PILOT IN COCKPIT.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E

ENCLOSURE (21) VA-152 AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI
ESTIMATE 5 MINUTES AFTER IMPACT. NOTE FIRE INCREASING IN INTENSITY. PILOT
IN COCKPIT.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E

ENCLOSURE (23) VA-152 AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI.
ESTIMATE 13 MINUTES AFTER IMPACT. NOTE FIRE DAMAGE AT THIS TIME. PILOT
IN COCKPIT.

ENCLOSURE (24) VA-152 AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI
ESTIMATE 15 MINUTES AFTER IMPACT. HELICOPTER HOVERING TO EXTRACT PILOT.
PILOT IN COCKPIT.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E

ENCLOSURE (25) VA-152 AAR 1-67A 27 JAN 67 AIR EWO 139728 PILOT ZAMBORI
REIGNITION OF FIRE CAUSED BY DOWNWASH OF HELICOPTER. PILOT REMOVED FROM
COCKPIT.

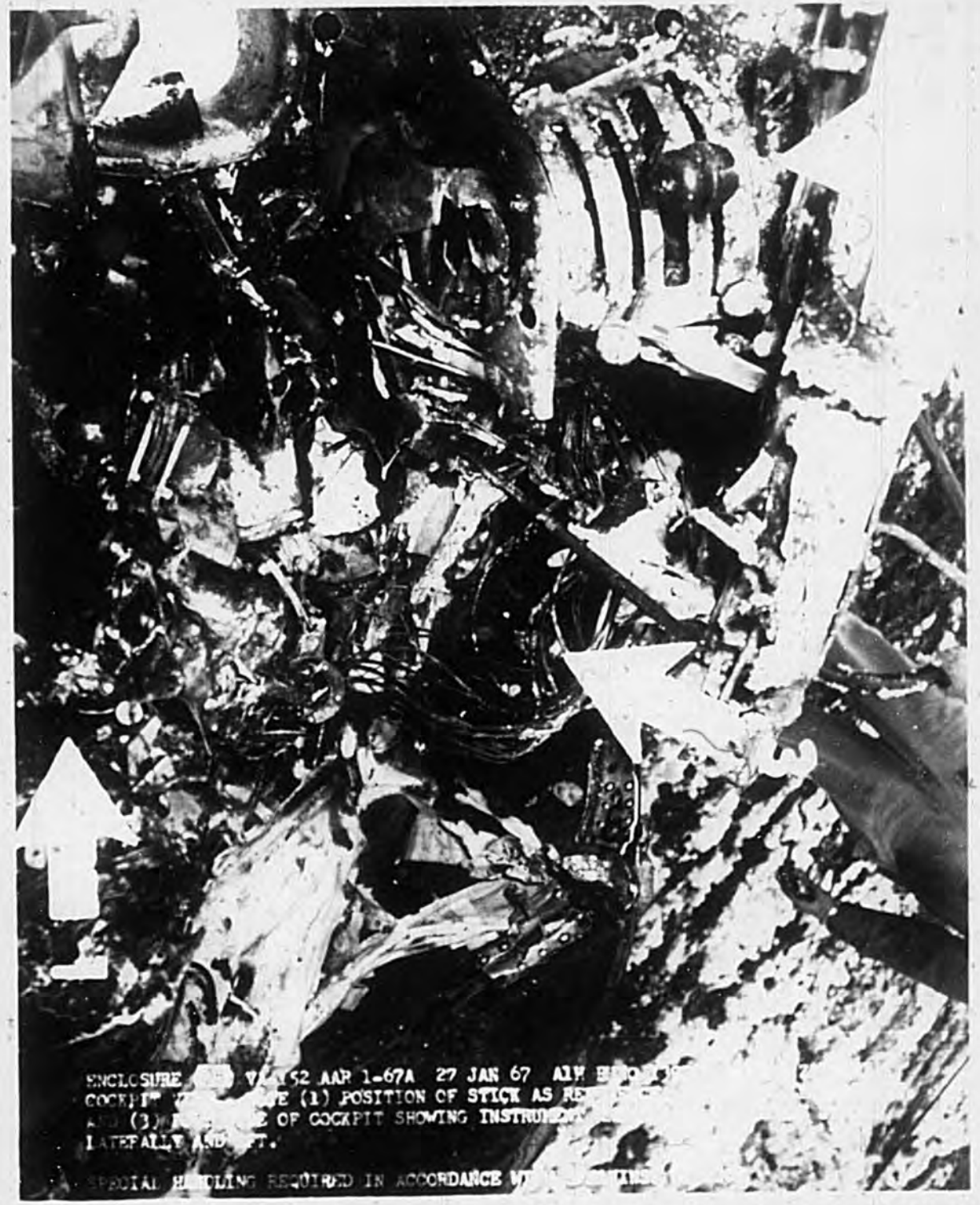
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E

ENCLOSURE (26) VA-152 AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI
FIRE COMPLETELY OUT. NOTE FURTHER DAMAGE BY REIGNITION CAUSED BY HELICOPTER
DOWNWASH.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E

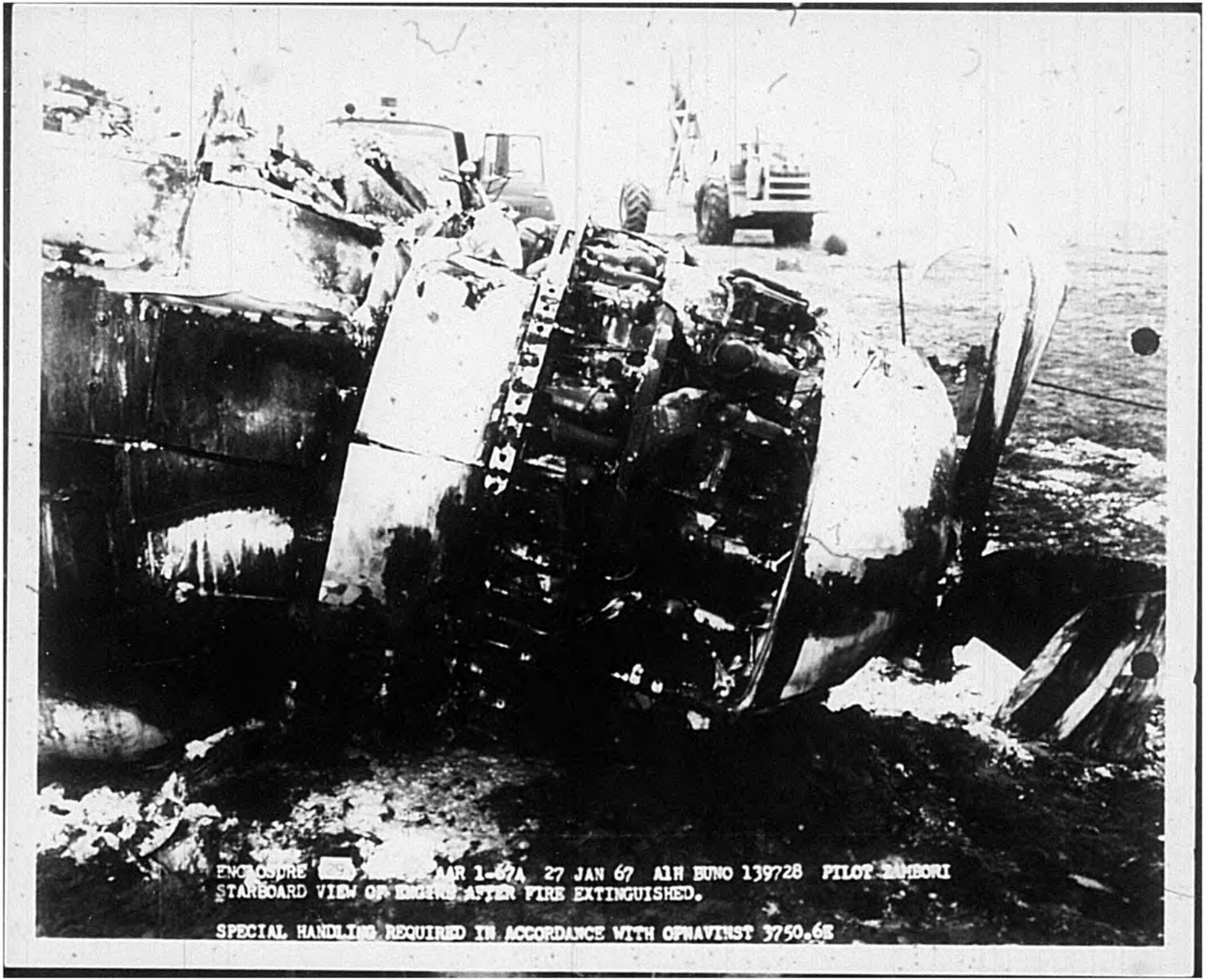
ENCLOSURE [redacted] VA-152 AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI OVERHEAD VIEW. NOTE(1) AND (2) SHOWING INITIAL IMPACT OF PORT AND STARBOARD LANDING GEAR. NOTE(3) SHOWING IMPRINT OF AERO 14E BOMBRACKS AND STARBOARD WING AFTER INITIAL IMPACT. NOTE(4) STARBOARD WING AND (5) PORT WING.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E



ENCLOSURE [illegible] V[illegible] 52 AAR 1-67A 27 JAN 67 AIW [illegible]
COCKPIT [illegible] (1) POSITION OF STICK AS RE[illegible]
AND (3) [illegible] OF COCKPIT SHOWING INSTRUM[illegible]
LATERALLY AND [illegible]T.

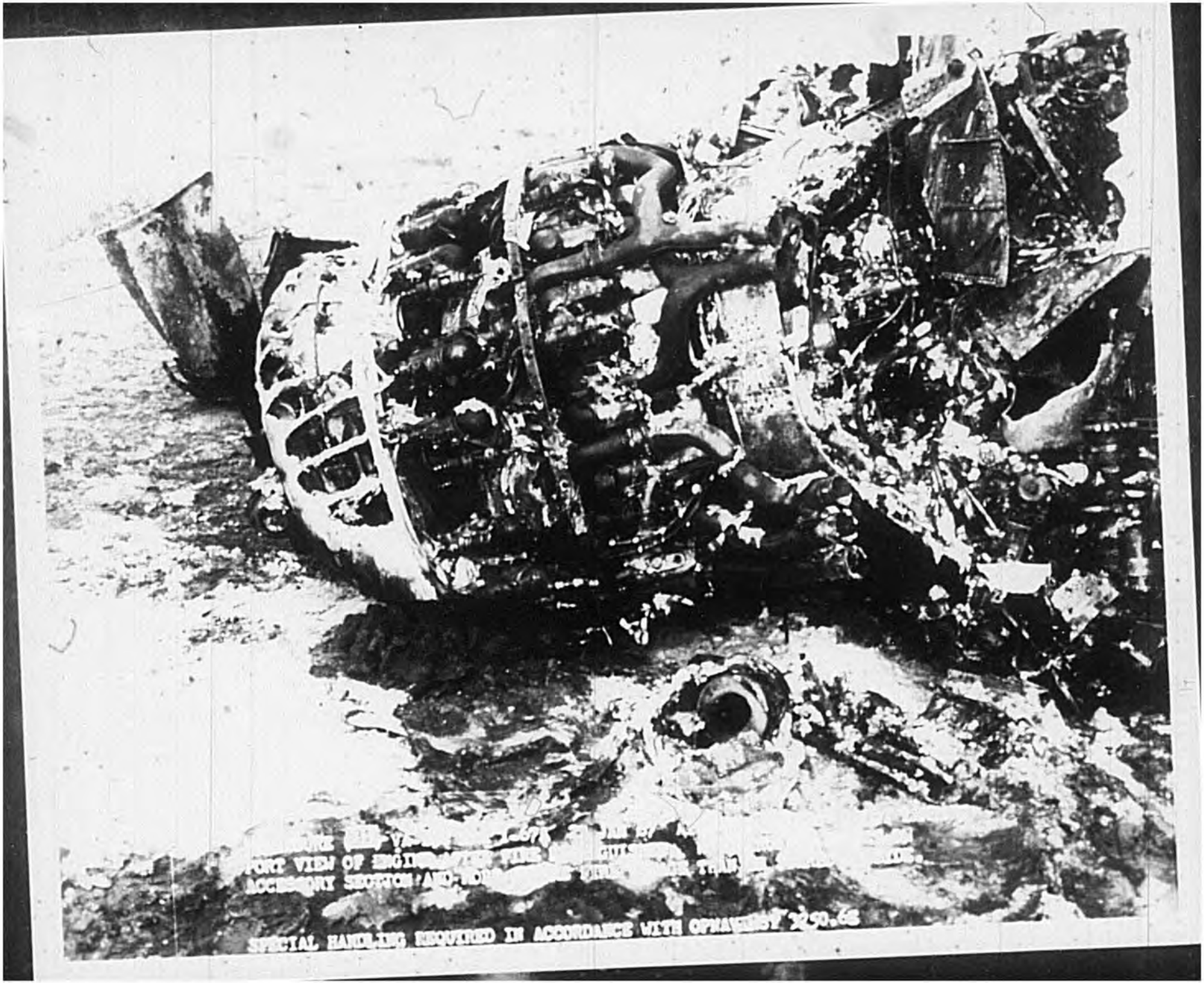
SPECIAL HANDLING REQUIRED IN ACCORDANCE W[illegible]



ENCLOSURE [redacted] AAR 1-67A 27 JAN 67 A1H BUNO 139728 PILOT ZAMBORI
STARBOARD VIEW OF ENGINE AFTER FIRE EXTINGUISHED.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6E

ENCLOSURE [redacted] VA-152 [redacted] 27 JAN 67 A1H HUNO 139728 PI[redacted] ZAMBORI
FRONT VIEW OF ENGI[redacted]TINGUISHED.
SPECIAL HANDLING [redacted] IN ACCORD[redacted]CE WITH OPNAVINST 3750.6E


PORT VIEW OF ENGINE
ACCESSORY SECTION AND
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 2290.6B

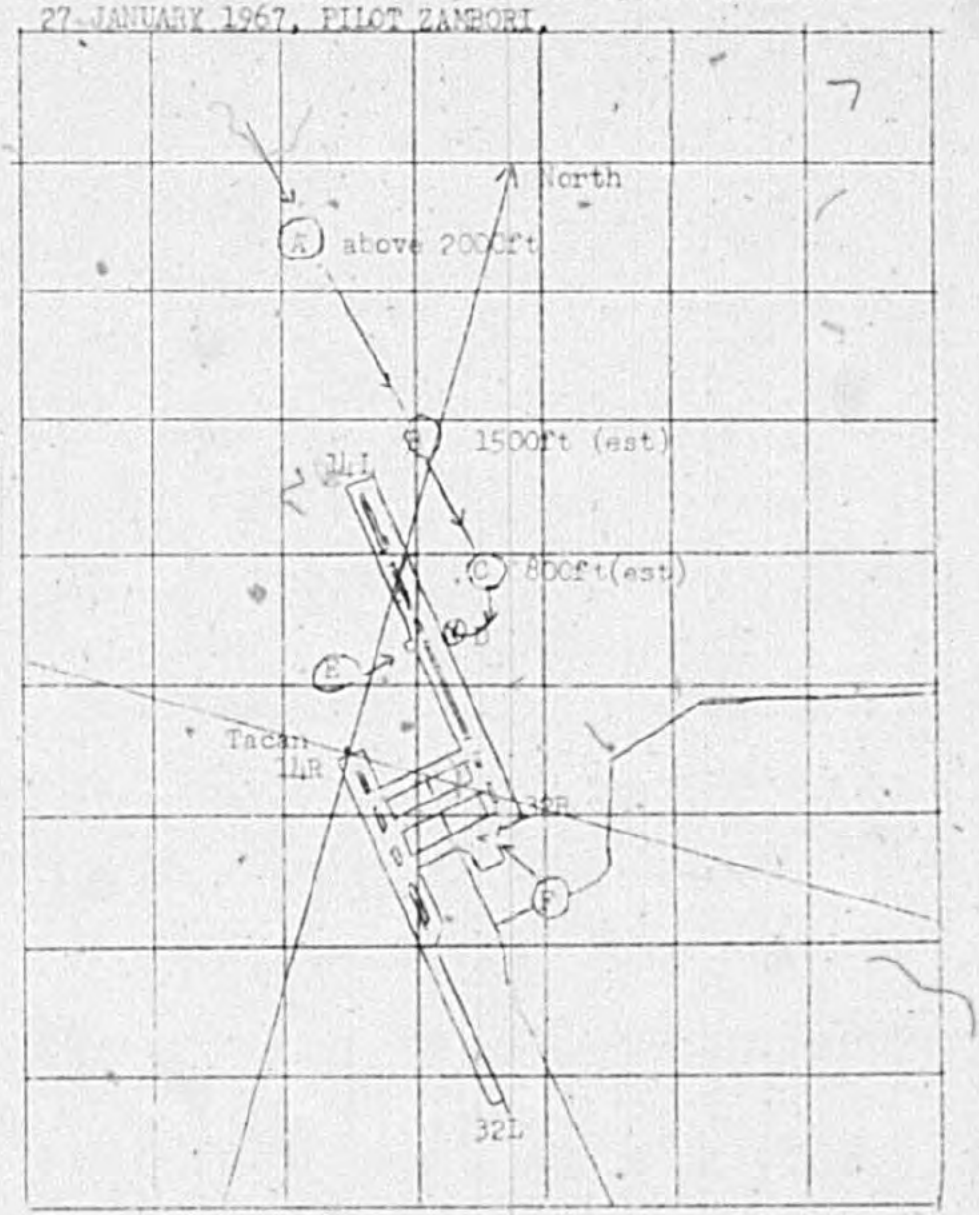
VZCZCMHA712
RTTU JAW RUWMHVA2961 0421745-UUUU--RUWMHMA.
ZNR UUUUU
R 111642Z FEB 67
FM NAS ALAMEDA
TO RUWJMUA/NAVAIRSYSCOMREPAC
INFO RUEOBHB/NAVAIRSYSCOM
RUWJMUA/COMNAVAIRPAC
ZEN/COMFAIRALAMEDA
RUWMHMA/COMATKCARAIRWING SIXTEEN
RUCILSA/NAVAVNSAFECEN NORVA
RUEDDOA/DCASO WOODRIDGE
RUWMHMA/NAS LEMOORE
RUWMHMA/ATKRON ONE TWO TWO
ZEN/ATKRON ONE FIVE TWO
BT
UNCLAS
R335U-26BD ENGINE SERIAL W-531098, PRIORITY DIR
A. YOUR 048122Z FEB 67 (NOTAL)
1. ENGINE IN-FLIGHT FIRE POSITIVELY DETERMINED.
2. CAUSE OF ENGINE FIRE DUE TO NUMBER TEN CYLINDER EXHAUST PIPE EXTENSION SEPARATION FROM EXHAUST SYSTEM. REASON FOR EXHAUST SYSTEM SEPARATION NOT DEFINITELY ESTABLISHED.
3. IN-FLIGHT FIRE BURNED HOLE THROUGH DUAL INTAKE PIPES OF CYLINDERS NINE AND TEN. SUBSEQUENT INDUCTION FIRE CAUSED COMPLETE LOSS OF POWER.
4. ENGINE AND OIL COOLER CONTAMINATED WITH ALUMINUM PARTICLES. DETAILED INSPECTION REVEALED NO INTERNAL ALUMINUM PARTS FAILURE OR WEAR. INDICATING OIL SYSTEM WAS CONTAMINATED FROM PRIOR CYLINDER FAILURE. REPLACEMENT CYLINDER ASSEMBLY WAS LATEST DESIGN AND CORRECTLY INSTALLED WITH NO SIGN OF FAILURE. METAL CONTAMINATION NOT DIRECTLY RELATED TO ENGINE FAILURE.
5. DETAILED REPORT WILL FOLLOW UNDER CONTROL NUMBER 3197-67.
BT

11 FEBRUARY 1967
S O U T I N E
TOR:411815Z/FEB '67/MAC/
DTG:111642Z/FEB '67
ACT:AM DT Z
A/AA AD CR CM AO AS ODU
VA-122 DT Z
CAW-16 DT

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

ENCLOSURE(32)

FLIGHT PATH DIAGRAM OF AH501 BUNO 139728 ACCIDENT OF 27 JANUARY 1967, PILOT ZAMBORI.



0 1mile 2miles

Scale

A. Approximate initial call up point, ~~5~~ 2 minutes before crash.
B. Initial sighting by witnesses.
C. Approximate position at last transmission.
D. Crash site.
E. Hardstand position of Lemoore 12(alert MB-5)
F. Position of second alert MB-5

AUTHENTICATED

(b) (6) [redacted]

LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ENCLOSURE (33)

NNNNZCZCNASC567VZCSLA404
RTTU JAW RUWMHVA2961 0421745-UUUU--RUCILSA.
ZNR UUUUU
R 111642Z FEB 67
FM NAS ALAMEDA
TO RUWJMUA/NAVAIRSYSCOMREPAC
INFO RUEDBHB/NAVAIRSYSCOM
RUWJMUA/COMNAVAIRPAC
ZEN/COMFAIRALAMEDA
RUWMHMA/COMATKCARAIRWING SIXTEEN
RUCILSA/NAVAVNSAFECEN NORVA
RUEDDOA/DCASO WOODRIDGE
RUWMHMA/NAS LEMOORE
RUWMHMA/ATKRON ONE TWO TWO
ZEN/ATKRON ONE FIVE TWO
BT
UNCLAS
R3350-26WD ENGINE SERIAL W-531090, PRIORITY DIR
A. YOUR 040122Z FEB 67 (NOTAL)
1. ENGINE IN-FLIGHT FIRE POSITIVELY DETERMINED.
2. CAUSE OF ENGINE FIRE DUE TO NUMBER TEN CYLINDER EXHAUST PIPE EXTENSION SEPARATION FROM EXHAUST SYSTEM. REASON FOR EXHAUST SYSTEM SEPARATION NOT DEFINITELY ESTABLISHED.
3. IN-FLIGHT FIRE BURNED HOLE THROUGH DUAL INTAKE PIPES OF CYLINDERS NINE AND TEN. SUBSEQUENT INDUCTION FIRE CAUSED COMPLETE LOSS OF POWER.
4. ENGINE AND OIL COOLER CONTAMINATED WITH ALUMMINUM PARTICLES. DETAILED INSPECTION REVEALED NO INTERNAL ALUMINUM PARTS FAILURE OR WEAR, INDICATING OIL SYSTEM WAS CONTAMINATED FROM PRIOR CYLINDER FAILURE. REPLACEMENT CYLINDER ASSEMBLY WAS LATEST DESIGN AND CORRECTLY INSTALLED WITH NO SIGN OF FAILURE. METAL CONTAMINATION NOT DIRECTLY RELATED TO ENGINE FAILURE.
5. DETAILED REPORT WILL FOLLOW UNDER CONTROL NUMBER 3197-67.
BT

567
66

VA 152
282135 AAR

Cog: M+M

Feb
111642Z

AIH 139728 VA-152 7-66A 1-27-67

FZCNASC923PU
RTTU JAW RUWJMUA8642 0350122-UUUU--RUCILSA.
ZNR UUUUU
P 040122Z FEB 67
FM NAVAIRSYSCOMREPAC
TO RUWMHVA/ATKRONONE FIVE TWO
RUWMHMA/BAS LEMOORE
RUWMHVA/NAS ALAMEDA
INFO RUEDBHB/NAVAIRSYSCOM
RUWMHMA/STKRON ONE TWO TWO
ZEN1/COMNAVAIRPAC
RUCILSA/NAVAVMSAFECEM
RUWMHVA/COMFAIRALAMEDA
RUWMHMA/COMATKCARAIRWING SIXTEEN
BT
UNCLAS
R3350-26WD S/N W-531090 ENGINE FAILURE
A. NAVAIRSYSCOMREPAC 030113Z FEB 67 NOTAL
B. COMNAVAIRPAC/BWFRRPAC INST 4730.8A
C. ATKRON ONE FIVE TWO 282135Z JAN 67
1. ATKRON 152: CANCEL REQ PARA 1 REF A.
2. NAS LEMOORE: REQ TAKE PARA 1 GEF A FOFAC. ENGINE LOCATED YOUR ACTIVITY. REQ FWD SUBJ ENGINE TO NAS ALAMEDA O&R DEPT.

PAGE TWO RUWJMUA8642 UNCLAS
MARK CONTAINER AND DOCUMENTS FOR PRIORITY DIR JAW REF B. ADSHIPA. REFER NAVAIRSYSCOMREPAC CONTROL NR 3197-67. REF C REFERS.
3. NAS ALAMEDA: REQ INCLUDE ATKRON 122 ALL RELATED CORRES.
BT

#923/67

COF NAM

FEB

040122Z

AIH-139728 VA-152 7-66A 1-27-67

NNNNZCZCNASC687A560
PTTU JAW RUWJMUA8583 0340113-UUUU--RUCILSA.
ZNR UUUUU
P R 030113Z FEB67
FM NAVAIRSYSCOMREPAC
TO RUWMHVA/ATKRON ONE FIVE TWO
RUWMHVA/NAS ALAMEDA
INFO RUEDBHB/NAVAIRSYSCOM
ZEN1/COMNAVAIRPAC
RUCILSA/NAVAVNSAFECEN
RUWMHVA/COMFAIRALAMEDA
RUWMHMA/COMATKCARAIRWING SIXTEEN
RUWMHMA/NAS LEMOORE
BT
UNCLAS
R3350-26WD S/N W-531090 ENGINE FAILURE
A. ATKRON ONE FIVE TWO 290207Z JAN 67.
B. COMNAVAM. COMNAVAIRPAC/BWFRRPAC INT 4730.8A
1. ATKRON 152: REQ FWD REF A ENGINE TO NAS ALAMEDA O&R DEPT.
MARK CONTAINER AND DOCUMENTS FOR PRIORITY DIR IAW REF B..
ADSHIPDA. REFER NAVAIRSYSCOMREPAC CONTROL NR 3197-67.
2. NAS ALAMEDA: REQ CONDUCT ENGINEERING ALALYSIS SUBJ
ENGINE IAW REF B. ADCON RELSUTS. ABOVE CONTROL NR ASGD.
BT

#687/67

Cog: MHM

Ad.

030113Z

AIH 139728 VA-152 2-CCA 1-27-67

NNNN
SWWRPAGUCFNCZCSLA291
RTTU JAW RUWMHMA0002 0332001-UUUU--RUCILSA.
ZNR UUUUU
R 020008Z FEB 67
FM ATKRON ONE FIVE TWO DET LEMOORE
TO RUWJMUA/COMNAVAIRPAC
RUWJMUA/NAVAIRSYSCOMREPAC
INFO RUWMHVA/ATKRON ONE FIVE TWO
RUCILSA/NAVAVSAFECEN
RUEDBHB/NAVAIRSYSCOMHQ
ZEN/ATKRON ONE TWO TWO
ZEN/NAS LEMOORE
RUWMHVA/COMFAIRALAMEDA
BT
UNCLAS
ATKRON 152 AIH ACCIDENT REPORT 1-67A
A. COMNAVAIRPAC 312335Z
B. GREB 202
C. MY 290207Z
1. IAW REF (A) THE FOLLOWING INFO IS SUBMITTED.
A. ENTIRE PISTON AND CYLINDER ASSEMBLY CHANGED AT NAS LEMOORE OMD AS RESULT OF EMERGENCY LANDING DUE TO ROUGH RUNNING ENGINE ON 10 JAN 67.
B. IN OPINION OF MR WHITTINGTON WRIGHT REP ATTACHED TO

546/67

Cog Records

PAGE 2 RUWMHMA0002 UNCLAS
VA-122 PROVISIONS OF PART I REF (B) NOT COMPLIED WITH.
C. CYL/PISTON BOTH AVAILABLE FOR DIR. BOTH TO BE FORWARDED WITH ENGINE.
2. REQ NAVAIRSYSCOMREPPAC ADTAKE REF (C). REQ VA-122 BE MADE ACTION ADEES ALL FURTHER MSG TRAFFIC CONCERNING REF (C).
BT

0200087

~~VA-152~~ AIH 137728 VA-152 1-67A 1-27-67

NNNNZCZCNASC43CCZCSLA657
RTTU JAW RUWJMUA0055 2312335-UUUU--RUCILSA.
ZNR UUUUUU
R 312335Z JAN 67
FM COMNAVAIRPAC
TO RUWMHVA/ATKRON ONE FIVE TWO
INFO RUCILSA/NAVAVSAFECEN
RUEDBHB/NAVAIRSYSCOMHQ
RUWMHMA/ATKRON ONE TWO TWO
RUWMHMA/NAS LEMOORE
RUWMHVA/COMFAIRLAAMEDA
ZEN1/NAVAIRSYSCOMFEPAC
BT
UNCLAS
AIH ACCIDENT REPT 1-67A
A. YOUR 282135Z JAN 67
B. GREB 202
C. BWFRRPAC/COMNAVAIRPACINST 4730.3A
1. REQ ADVISE FOLLOWING ADDTL DETAILS NR 10 CYLINDER CHG
REPT PARA 12 REF A:
A. WAS ENTIRE PISTON AND CYLINDER ASSEMBLY CHGED OR
JUST THE CYLINDER?
B. WERE CRITERIA ESTABLISHED PART I REF B USED TO

PAGE TWO RUWJMUA0055 UNCLAS
DETERMINE CYLINDER CHG VICE ENG CHG?
C. IF REMOVED CYL/PISTON AVAIL RETAIN FOR DISPORITION/DIR
INSTRUCTIONS.
D. ANY ADDTL DETAILS CONDIDERED APPLICABLE.
2. ENSURE DIR CONTROL NR REQUESTED IAW REF C, ON REMOVED CYL IF AVAILABLE

BT

130/67

Chg Records

312335Z

AIH 139728 VA-152 1-27-67

143/67

NNNN
FWWRPAGQQY
CZCSLA628
RTTU JAW RUWMHMA0003 0290207-UUUU--RUCILSA.
ZNR UUUUU
R 290207Z JAN 67
FM ATKRON ONE FIVE TWO
TO RUWJMUA/NAVAIRSYSCOMFEPPAC
RUWMHVA/COMFAIRALAMEDA
INFO RUWJMUA/COMNAVAIRPAC
RUCILSA/NAVAVSAFECEN
ZEN/COMATKCARAIRWING ONE SIX
RUWMHVA/NAS ALAMEDA
ZEN/NAS LEMOORE
BT
UNCLAS
A. BWFRRPACINST 4730.8A
B. ATKRON ONE FIVE TWO 282135Z JAN 67
1. IAW REF A, REQ PRIORITY DIR ON R-3350-26WD, SER NO. W-531090, REMOVED FROM A1H BUNO 139728.
BT

Coc M&M

JAN
290202Z

A1H 139728 VA-152 7-66A 1-27-67

7

117/67

SUP. AAR

NNNNZCZCNASC117578
OTTU JAW RUWMHMA0037 2282136-UUUU--RUCILSA.
ZNR UUUUU
O 282135Z JAN 67
FM ATKRON ONE FIVE TWO
TO RUCIJDA/CNO
RUCILSA/NAVAVSAFECEN
INFO RUEDBHB/NAVAIRSYSCOMHQ
RUWMMEA/COMTWELVE
RUWMHVA/COMFAIRALAMEDA
ZEN/COMATKCARAIRWING ONE SIX
RUWJMUA/NAVAIRSYSCOMREPAC
RUWJMUA/COMNAVAIRPAC
RUHLHL/CINCPACFLT
ZEN/ATKRON ONE TWO TWO
RUCIJFA/BUPERS
RUCILMA/COMANVAIRLANT
RUWJABA/DIRECTOR AEROSPACE SAFETY
ZEN/NAS LEMOORE
RUEOPDA/DIRECTOR ARMED FORCES INSTITUTE OF PATHOLOGY
BT
UNCLAS
SUPPLEMENTARY MESSAGE REPORT OF AIRCRAFT ACCIDENT 1-67A (OLD 7-66A)
A. OPNAVINST 3760.6E
B. MY 272336Z
1. A1H, 139728, VA-152, SER 1-67A (OLD 7-66A) ZAMBORI
2. TEST, NAS LEMOORE TO NAS ALAMEDA, 0 PLUS 07
3. ALFA, BURNED ON IMPACT
4. EMERGENCY APPROACH DUE TO ENGINE FAILURE
5. PILOT REPORTED ENGINE DIFFICULTY AND FIRE 2 MILES NORTH OF FIELD AT 2000 FT APPROX 2 MIN AFTER TAKEOFF FROM NAS LEMOORE RW 32R. PILOT

PAGE TWO RUWMHMA0037 UNCLAS
REQUESTED AND RECEIVED CLEARANCE FOR LOW KEY TO RW 32R. MIDWAY DOWNWIND PILOT REREQUESTED AND RECEIVED CLEARANCE FOR MIDFIELD LANDING. PILOT COMMENCED TURN TO RUNWAY AT MIDFIELD WITH GEAR DOWN, WINDMILLING ENGINE, APPROX 800' AGL. PILOT PICKED NOSE UP IN ATTEMPT TO STRETCH GLIDE AT 45 DEGREE POSITION APPROX 150' AGL, AND STALLED. AIRCRAFT IMPACTED SLIGHT RIGHT WING DOWN, 15 DEGREES NOSE DOWN, HIGH RATE OF SINK, 400' EAST OF RUNWAY. NO NOTICEABLE FIRE FROM A/C PRIOR TO IMPACT. A/C BROKE UP ON IMPACT AND BURNED.
6. WIND LIGHT AND VARIABLE, CEILING UNLIMITED, TEMP 64 DEW PT 48, VIS 3M.
7. UNKNOWN ENGINE MALFUNCTION, PENDING DIR
8. YES
9. NONE
10. NONE
11. (b) (6) [redacted] AN, CRASH CREWMAN, (b) (6) [redacted] MODERATE, SMOKE INHALATION.
(b) (6) [redacted] CIVILIAN FIRE FIGHTER, MODERATE, SMOKE INHALATION
CIVILIAN FIRE FIGHTER , MODERATE, CMSMOKE INHALATION
CIVILIAN FIRE FIGHTER, MINOR, 2ND DEGREE BURN
, CIVILIAN FIRE FIGHTER, MINOR, MUSCLE STRAIN

PAGE THREE RUWMHMA0037 UNCLAS
12. ENGINE SER NO W-531090. NR 10 CYLINDER REPLACED AFTER EXHAUST VALVE HAD BEEN SWALLOWED ON PREVIOUS FLIGHT. CRASH PERSONNEL AT COCKPIT WHILE PILOT STILL ALIVE BUT UNABLE TO EXTRACT HIM BEFORE COCKPIT AREA CONSUMED BY FIRE.

JAN
2821352

A1H 139728 VA-152 1-67A 1-27-67

NNNNFZCNASC022SLB404
PTTU JAW RUWMHVA0944 0272339-UUUU--RUCILSA.
ZNR UUUUU
P 272336Z JAN 67
FM ATKRON ONE FIVE TWO
TO RUCIJDA/CNO
RUCILSA/NAVAVSAFECEN
INFO RUEDBHB/NAVAIRSYSCOM
RUWMMEA/COMNAB TWELVE
ZEN/COMFAIRALAMEDA
RUWMHMA/COMATKCARAIRWING SIXTEEN
RUWJMUA/NAVAIRSYSCOMREPAC
RUWJMUA/COMNAVAIRPAC
RUWMHMA/ATKRON ONE TWO TWO
RUHLHL/CINCPACFLT
RUCIJFA/BUPERS
RUCILMA/COMNAVAIRLANT
RUWJABA/DIRECTOR AEROSPACE SAFETY
RUWMHMA/NAS LEMOORE
BT
UNCLAS
PRELIMINARY MESSAGE REPORT OF AIRCRAFT ACCIDENT 1-67A 7-66A
A. OPNAVINST P3150.6E
1. A1H, 139728, VA-152
2. 27 JANUARY 1967, 1329U, NAS LEMOORE
3. TEST
4. ALFA
5. ATTEMPTED MIDFIELD EMERGENCY LANDING AFTER FIRE ON TAXEOFF. APPARENT STALL/SPIN AT 45 DEGREES. AIRCRAFT BURNED ON IMPACT 50 FEET RIGHT OF RUNWAY 32R AT NAS LEMOORE

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6. ZAMBORI, DONALD PAUL, LT, (b) (6) [redacted] USNR, 1315, ACTIVE, FATAL
7. NA
8. NA
9. NA
BT

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