Duplicative

R&DP-20-1(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

9 APR 1969

(COMMON TO BOTH CARDS) CODED: DG REVIEWED: [illegible] LOGGED: JS PUNCHED: D VERIFIED: P

CARD 1

Section	Field	Columns	Entry
RECORD IDENTIFICATION – Date	Cal. Yr.	01–02	6 8
	Mo.	03–04	1 2
	Day	05–06	Ø 9
	Type Report	07	1
	Log Line Number	08–09	Ø 1
	Aircraft Number	10–11	Ø 1
	Source	12	1
	Don't Count	13	
	Enemy Action	14	
Aircraft Model	Mission Modif.	15–16	
	Basic Mission	17	A
	Design Number	18–20	Ø Ø 7
	Series Symbol	21	B
	Model Code	22–23	Ø 6
	AIRCRAFT BUREAU NUMBER	24–29	1 5 4 4 9 8
	Reporting Custodian	30–32	2 Ø 6
	Type Duty	33–35	3 2 1
	Major Command	36	1
Time of Mishap	CONDITION	37	4
	LOCAL TIME	38–41	2 2 2 4
	Acft. Dmg.	42	C
	Acft. Dmg.	43	C
	Acft. Inj.	44	G
	Acft. Inj.	45	G
	Hull Number	46–48	
	Kind of Flight	49–51	3 A 3
	Clearance	52	3
Location	NAME CODE	53–59	A I M I R M R
	Bearing From	60–61	
	Dist. From	62	A
FAC. RWAY DESCRIP.	Distance	63	
	Area	64	
	Runway Heading	65–66	2 4
	Length	67	
	WAS DUTY RWY USED?	68	1
FAC. SHIP DESCRIP.	Ship Type	69–70	
	Ship Course	71	
	Ship Speed	72–73	
LOC'N	Initial Contact	74	
	Final Rest	75	
		76	
	Trans. Code	77	A
	Card Number	78–80	Ø 1 Ø

CLOSED 17 AUG 1970

CARD 2

Section	Field	Columns	Entry
RELATIVE WIND	Direction	12–13	
	Velocity	14–15	7 Z
	Density Altitude	16–18	
Alt. of Emergency	Above Terrain	19–21	A Ø Ø
	Pressure Altitude	22–24	
	Acft. Gross Weight	25–28	Ø Ø 2 4
		29–30	
	Fiscal Year	31–32	6 9
	Fleets and Maws.	33–34	
		35–49	
		50–52	
PROPERTY DAMAGE COST	Gov't.	53–55	Ø Ø Ø
	Non Gov't.	56–58	Ø Ø Ø
	Total Occupants This Acft.	59–60	Ø 1
Aircraft Injury Summary – TOTAL INJURIES "A" "U" "L"	Navy	61–62	
	Non Navy	63–64	
"A" Injuries	Navy	65–66	
	Non Navy	67–68	
"U" Injuries	Navy	69–70	
	Non Navy	71–72	
"L" Injuries	Navy	73–74	
	Non Navy	75–76	
	Trans. Code	77	A
	Card Number	78–80	Ø 2 Ø

AIRCRAFT 1 OF 2

CODE SHEET 1 OF 20

R&DP-20-2(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED: ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 3

RECORD IDENTIFICATION											Aircraft Injury Summary (cont'd)																								
Date					Type Report	Log Line Number		Aircraft Number			"B" Injuries		"C" Injuries		"D" Injuries		"E" Injuries		"F" Injuries		"G" Injuries		Total Injuries		No. Occupants All Acft. Involved		
Cal. Yr.	Mo.		Day								Navy	Non Navy	Navy	Non Navy	Navy	Non Navy	Navy	Non Navy	Navy	Non Navy	Navy	Non Navy	Navy	Non Navy			
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	1																					0	1			0	1			0	0	2

ESCAPE SYS. DATA																																									
Sys.	Comp-onent	Spec. Data																Component Separated From Aircraft	Pri Acdt. Type		Pri Phase of Operation		1st Acdt. Type		1st Phase of Operation		2nd Acdt. Type		2nd Phase of Operation			Trans. Code	Card No.		
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	75	76	77	78	79	80
																			A	2	5	3	3	A	2	5	3	3						A	0	3	0

CARD 4

	3rd Acdt. Type		3rd Phase of Operation				Type Operations		Contributing Causes							Pilot Error Causal Fac.						Pilot Factor After Fact.		Other Personnel Causal Factor						Other Pers. Factor After Fact		Inv. Mat. Comp. 1st Causal Factor					
																First		Second		Third				First		Second		Third				Cross Ref.	Compo-nent	Ass'y.		Sub Ass'y.	
12	13	14	15	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
							3		2	1						B	A	X	V	X	B			A	M	B	Z	E	I									

Involved Mat. Comp. (cont'd.)												Material Fact. After Fact						Acft. Design Comp. Causal Factor						DESIGN C.F.					
2nd Causal Factor						3rd Causal Factor																							
Cross Ref.	Compo-nent	Ass'y.		Sub Ass'y.		Cross Ref.	Compo-nent	Ass'y.		Sub Ass'y.		Cross Ref.	Compo-nent	Ass'y.		Sub Ass'y.		Cross Ref.	Compo-nent	Ass'y.		Sub Ass'y.		Special Equipment	Pilot Equipment			Trans. Code	Card No.
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	75	76	77	78	79	80
																											A	0	4	0

AIRCRAFT 1 OF 2

CODE SHEET 2 OF 20

R&DP-20-3(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 6

RECORD IDENTIFICATION											Weather Causal Factor						Facility Causal Factor	Facility Fact. After Fact	Environ. Factor									Cause + Factor Primary							Cause + Factor 1st Possible						
Date																																										
Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number																																	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	1									M									1					B	A							

Cause + Factor 2nd Possible							Cause + Factor 3rd Possible							Cause + Factor 4th Possible							Special Attention	Special Data and Conditions												Trans. Code	Card Number		
Misc							Misc							Misc																								
Wx						Fact	Wx						Fact	Wx						Fact																		
Pers					Factor		Pers					Factor		Pers					Factor																			
Mat	X Ref	COMP	Ass'y.		Sub Ass'y.		Mat	X Ref	COMP	Ass'y.		Sub Ass'y.		Mat	X Ref	COMP	Ass'y.		Sub Ass'y.																			
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	75	76	77	78	79	80
																						M	K											A	0	6	0

CARD 8

								Material Special Data																																		
								First				Second				Third				Fourth				Fifth				Maneu. Prior To Occur.	OPERATOR INCAPACITATED C.F.												
									Code				Code				Code				Code				Code																	
12	13	14	15	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

																						Multi-Occurrences			Multi-Maintenance Problems		Trans. Code	Card Number													
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	75	76	77	78	79	80												
																												0	8	0												

AIRCRAFT 1 OF 2

CODE SHEET 3 OF 20

R&DP-20-4(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 9

Section	Field	Columns	Entry
RECORD IDENTIFICATION – Date	Cal. Yr.	01–02	6 8
RECORD IDENTIFICATION – Date	Mo.	03–04	1 2
RECORD IDENTIFICATION – Date	Day	05–06	Ø 9
RECORD IDENTIFICATION	Type Report	07	1
RECORD IDENTIFICATION	Log Line Number	08–09	Ø 1
RECORD IDENTIFICATION	Aircraft Number	10–11	Ø 1
	1st Flight After Maint.	12	
	D. I. R.	13	
Aircraft Data	Tour	14	
Aircraft Data	Hours Since Acceptance	15–18	1 1 1 (cols 16–18)
Aircraft Data – Since Last Insp.	Type	19	
Aircraft Data – Since Last Insp.	Hours	20–22	
Aircraft Data – Since Last Insp.	Days	23–24	
Aircraft Data – Since Last Par/O'Haul	Activity	25	
Aircraft Data – Since Last Par/O'Haul	Hours	26–29	
Aircraft Data – Since Last Par/O'Haul	Months	30–31	
	Power Plant Model Number	32–39	
	Power Plant Serial Number	40–46	
		47–49	
Primary Involved Material Component	Manufacturers Part Number	50–65	
Primary Involved Material Component	Total Hours	66–69	
Primary Involved Material Component – Since Last Par/O'Haul	Activity	70	
Primary Involved Material Component – Since Last Par/O'Haul	Number	71	
Primary Involved Material Component – Since Last Par/O'Haul	Hours	72–75	
		76	
	Trans. Code	77	A
	Card Number	78–80	ø 9 ø

CARD 10

Section	Field	Columns	Entry
Pri. Inv. Mat. Comp. (cont'd) – Since Last Check Perf.	Type	12	
Pri. Inv. Mat. Comp. (cont'd) – Since Last Check Perf.	Hours	13–15	
Pri. Inv. Mat. Comp. (cont'd) – Since Last Check Perf.	Days	16–17	
Possible or Secondary Involved Material Component	Manufacturers Part Number	18–33	
Possible or Secondary Involved Material Component	Total Hours	34–37	
Possible or Secondary Involved Material Component – Since Last Par/O'Haul	Activity	38	
Possible or Secondary Involved Material Component – Since Last Par/O'Haul	Number	39	
Possible or Secondary Involved Material Component – Since Last Par/O'Haul	Hours	40–43	
Possible or Secondary Involved Material Component – Since Last Check Perf.	Type	44	
Possible or Secondary Involved Material Component – Since Last Check Perf.	Hours	45–47	
Possible or Secondary Involved Material Component – Since Last Check Perf.	Days	48–49	
		50–76	
	Trans. Code	77	
	Card Number	78–80	1 ø ø

AIRCRAFT 1 OF 2

CODE SHEET 4 OF 20

R&DP-20-6(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 11

RECORD IDENTIFICATION											Controlling LSO's Carrier Pass Description																											
Date											Start							Middle							In-Close							Ramp						
Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number		Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position	Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position	Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position	Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
6	8	1	2	0	9	1	0	1	0	1																												

CLCPD (cont'd)																																								
TOUCH-DOWN																																								
Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position																															Trans. Code	Card Number		
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	75	76	77	78	79	80
																																						1	1	0

CARD 12

12	13	14	15	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

												File or Serial Number (Pilot)							Rank/Rate	Br. of Service	Age	Yrs. D.N.A.	Status	Position	Inj. to Indiv.	Abandon A/C	Trans. Code	Card Number		
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	75	76	77	78	79	80
												0	7	1	2	0	0	7	5	2	5	1	A	1	G	1	A	1	2	0

AIRCRAFT 1 OF 2

CODE SHEET 5 OF 20

R&DP-20-7(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 13

RECORD IDENTIFICATION										
Date: Cal. Yr.		Date: Mo.		Date: Day		Type Report	Log Line Number		Aircraft Number	
01	02	03	04	05	06	07	08	09	10	11
6	8	1	2	0	9	1	0	1	0	1

Pilot Factor Inv.	Service Tour	Instrument Card	Emerg. Syst. Train.: Last 6 Months		Emerg. Syst. Train.: Last 12 Months		Instrument Trainer: Last 6 Months		Instrument Trainer: Last 12 Months		Time All Models: Total		Time All Models: Last 3 Months		Time This Model: Total		Time This Model: Last 3 Months		Inst. Hours Last 3 Months		Nite Hours Last 3 Months		Total Jet or Helo Time		Number of →: Total	Day	Nite	Total Day This Model	
12	13	14	15	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
1		2			0	6			0	2	0	4	1	1	1	4	1	1	0	3	3	3	4	3	2	1	0	1	0

Carrier Landings: Total Nite This Model		This Model Last Day 30 Days		This Model Nite Last 30 Days												File or Serial Number (Co-Pilot)							Rank/Rate	Br. of Service	Age	Yrs. D.N.A.	Status	Position	Inj. to Indiv.	Abandon A/C	Pilot Factor Involved	Service Tour	Instr. Card		Trans. Code	Card Number		
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	75	76	77	78	79	80
0	6																																		A	1	3	0

CARD 14

Emerg. Syst. Train.: Last 6 Months		Last 12 Months		Instrument Trainer: Last 6 Months		Last 12 Months		Time All Models: Total		Last 3 Months		Time This Model: Total		Last 3 Months		Inst. Hours Last 3 Months		Nite Hours Last 3 Months		Total Jet or Helo Time		Number of Carrier Landings: Total	Day	Nite	Total Day This Model		Total Nite This Model		This Model Day Last 30 Days		This Model Nite Last 30 Days						
12	13	14	15	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

					File or Serial Number (Instr. Plt. in Other A/C)							Rank/Rate	Br. of Service	Age	Yrs. D.N.A.	Status	Position	Inj. to Indiv.	Abandon A/C	Pilot Factor Involved	Service Tour	Instr. Card					Trans. Code	Card Number		
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	75	76	77	78	79	80
																												1	4	0

AIRCRAFT 1 OF 2

CODE SHEET 6 OF 20

R&DP-20-8(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 15

RECORD IDENTIFICATION											Emerg. Syst. Train.				Instrument Trainer				Time All Models				Time This Model										Number of Carrier →						
Date																																							
Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number		Last 6 Months		Last 12 Months		Last 6 Months		Last 12 Months		Total		Last 3 Months		Total		Last 3 Months		Inst. Hours Last 3 Months		Nite Hours Last 3 Months		Total Jet or Helo Time		Total	Day	Nite	Total Day This Model		Total Nite This Model	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	1																													

Landings																																							
This Model Day Last 30 Days		This Model Nite Last 30 Days				This Individual in Acft.			Name (Instr. Plt. in Other Acft.)																				Number of Personnel Records							Trans. Code	Card Number		
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	75	76	77	78	79	80
																													0	1						A	1	5	0

CARD 16

P								File or Serial Number (All Persons)							Name										Rank/Rate	Br. of Service	Age	Yrs. Exper.	Status	Position	Inj. to Indiv.	Abandon A/C	Card Code 65				
12	13	14	15	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
P								(b) (6) [redacted]																	5	2	5	1	A	1	G	1	6	5			

Equip 1						Equip 2						Equip 3						Equip 4																	
Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip	Problem or Condition	Phase Existed	Special Data			Person Sequence Number		Trans. Code	Card Number							
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	75	76	77	78	79	80					
																									0	1	A	1	6	0					

PERSONNEL 1 OF 2

AIRCRAFT 1 OF 1

CODE SHEET 7 OF 20

R&DP-20-11(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 21

RECORD IDENTIFICATION										
Date										
Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number	
01	02	03	04	05	06	07	08	09	10	11
6	8	1	2	0	9	1	0	1	0	1

Equip 45						Equip 46						Equip 47						Equip 48										
Basic Equip.	Spec. Equip	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data	Card Code 66		ACFT DESCRIPT	MISHAP DESCRIPTOR	Topog.at Mishap
12	13	14	15	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
																								6	6	A	F	A

Type of Egress	Eject. Info.								Egress Problems									Type/Mod. Eject. Seat		Firing Method Seq. Eject.	Seat Position	Attitude/Maneu. A/C at Exit	Altitude When Ejected	Airspeed			Weight		Alt. Chute Open	In Crash Area	Time In Water	Person Sequence Number		Trans. Code	Card Number		
									Prior			During			Subsequent																						
									Prob	Prob	Prob	Prob	Prob	Prob	Prob	Prob	Prob																				
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	75	76	77	78	79	80
K																																		Ø	1	A	2	1	0

CARD 22

Time in Raft		Vertebral Fractures				Eject. Fatal Causes		Injury	Combat Zone									Card Code 67		Wind Velocity in Knots		Wave Height	Wave Interval in Seconds	Visibility	Air Temperature		Water Temperature		Alerting Factors			Located Site	Survivor Left Site	Means of Locating			
						Pri.	Sec.																						1st Factor	2nd Factor	3rd Factor						
12	13	14	15	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
								G										6	7					Ø	4	8			H			G		A	D		

Survival Factors		Fatals Time Lapse From:			Time Lapse Last Training				Training Factors																			Person Sequence Number		Trans. Code	Card Number		
		Mishap to Site Locat.	Site Locate to Victim	Mishap to Death	Low Press. Chamber	Eject. Tower	Eject. Seat	Survival																									
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	75	76	77	78	79	80			
					C	C	C	C	B																Ø	1	A	2	2	0			

PERSONNEL 1 OF 2

AIRCRAFT 1 OF 2

CODE SHEET 8 OF 20

NAVAVNSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 25

RECORD IDENTIFICATION						Survivor's Problems			Survivor's Condit.																														
Date																																							
Cal. Yr.	Mo.	Day	Type Report	Log Line Number	Aircraft Number				During	After	Time Lapse Reach to Rescue	Time Lapse Mishap to Rescue Completion	Rescue Recommend	CARD CODE 73	Weight	Height	Age	Sitting Height Nearest 1/4 Inch	Trunk Height Nearest 1/4 Inch	Functional Reach Nearest 1/4 Inch
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	1													7	3	1	5	3	6	9	2	4	3	6	2	2	5				

Buttock Knee Nearest 1/4 Inch	Leg Length Nearest 1/4 Inch		Biiliotoid Nearest 1/4 Inch	CARD CODE 74	Role of Indiv. in Cause	Supervisory Factors: Inadequate Briefing	Supervisory Factors: OBD/LEFT ON FLT BEY CAP	Supervisory Factors: Poor Crew Coordination	Supervisory Factors: Other	Pre-Flight Factors: Faulty Flight Plan	Pre-Flight Factors: Faulty A/C	Pre-Flight Factors: Faulty Prep. Pers. Equip.	Pre-Flight Factors: Hurried Departure	Pre-Flight Factors: Delayed Departure	Pre-Flight Factors: Inadequate Wx. Analysis	Pre-Flight Factors: Other	Experience Trng. Factors: Inadequate Transition	Experience Trng. Factors: LIMITED TOTAL EXPERIENCE	Experience Trng. Factors: LIMIT RECENT EXPERIENCE	Experience Trng. Factors: FAIL TO USE ACCEPT PROC.	Experience Trng. Factors: Other				Person Sequence Number	Trans. Codes	Card Number		
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	75	76	77	78	79	80
2	4		4	3				1	7	2	7	4																					0	1	A	2	5	8

CARD 27

Design Factors: Design of Instr/Controls	Design Factors: Location of Instr/Controls	Design Factors: Failure of Instr/Controls	Design Factors: COCKPIT LIGHTING: Runway	Design Factors: COCKPIT LIGHTING: Lighting	Design Factors: COCKPIT LIGHTING: Other A/C	Design Factors: PERSONAL EQU INTERFERENCE	Design Factors: WORK SPACE IN-COMPAT. W/MAN	Design Factors: Other	Communication Problems: MISINTERPRET COMM	Communication Problems: DISRUPTED COMM	Communication Problems: Language Barrier	Communication Problems: Noise Interference	Communication Problems: Other	Environmental Factors: ACCELERATION FOR IN FLIGHT	Environmental Factors: DECOMPRESSION	Environmental Factors: Vibration	Environmental Factors: Glare	Environmental Factors: Smoke Fumes	Environmental Factors: Heat	Environmental Factors: Cold	Environmental Factors: Wind Blast	Environmental Factors: VISIBILITY RESTRICTIONS: Wx. Haze Dark	Environmental Factors: VISIBILITY RESTRICTIONS: Icing Window Fog	Environmental Factors: VISIBILITY RESTRICTIONS: DUST WIND SMOKE	Environmental Factors: WX OTHER THAN VISIBILY	Environmental Factors: Other	CARD CODE 75		Psycho Physiological Factors: Food Poisoning	Psycho Physiological Factors: Motion Sickness	Psycho Physiological Factors: Other Acute Illness	Psycho Physiological Factors: OTH PRE EXIST DISEASE/DEFECT	Psycho Physiological Factors: Self "Homicide"	Psycho Physiological Factors: Hangover	Psycho Physiological Factors: Sleep Deprivation	Psycho Physiological Factors: FATIGUE, OTHER Missed Meals
12	13	14	15	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
																							A				7	5									

Psycho Physiological Factors (cont'd): DRUGS PRESCR MEDICAL DR.	Drugs, Other	Alcohol	Visual Illusions	HALLUCINATIONS	UNCONSCIOUSNESS	DISORIENTATION VERTIGO	Hypoxia	Hyper-Ventilation	Dysbarism	CO Poisoning	Boredom	Inattention	Channelized Attention	Distraction	PREOCCUPATIN PERS. PROB.	EXCESSIVE MOTIVATION TO SUC	Over Confidence	Lack of Self-Confidence	LACK OF CONFIDENCE IN EQUIP	Apprehension	Panic	Other			Person Sequence Number	Trans. Codes	Card Number		
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	75	76	77	78	79	80
																									0	1	A	2	7	8

PERSONNEL 1 OF 2

AIRCRAFT 1 OF 2

CODE SHEET 9 OF 20

NAVAVNSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED ____

CARD 29

RECORD IDENTIFICATION

Date: Cal. Yr.		Date: Mo.		Date: Day		Type Report	Log Line Number		Aircraft Number	
01	02	03	04	05	06	07	08	09	10	11
6	8	1	2	0	9	1	0	1	0	1

Other Factors To Be Considered

HABIT INTERFERE WRONG CONT.	CONFUS OF CONTR. OTHER	Misread Instruments	MISINTERPRET INSTRUMENTS	MISLED BY FAUL INSTRUM.	VIS. RESTR. BY EQUIP. STRUCT.	Task Over-Saturation	Inadequate Good/Timing	Misjudged Speed/Dist.	WRONG COURSE OF ACTION	DELAY TAKING NEC ACTION	VIOLATION OF FLT. DISCIP	Navigational Error	Inadvertent Operation	Other	CARD CODE 77	
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
									A						7	7

Disposition	Body Position	Direction Facing	Physical Defects Post Crash Exam.: VISUAL ACUITY OR NONE	Hearing	Cardio-Vascular	NEUROMUSCUL SKELETAL	Gastro-Intestinal	Respiratory	Urogenital	Other Abnormal	REASON FOR GROUNDING
29	30	31	32	33	34	35	36	37	38	39	40

Estimated Duration of Grounding		Pri. Cause of Death Diagnosis Number				Autopsy: Preformed	Protocol	Conducted By	Lab Toxicological Test On: Blood or None	Urine	GI Contents	CNS Contents	Muscle Tissue	Visceral Tissue	Other	ULTRA-VIOL OR OTH SPECIAL INVESTIG
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57

CARD CODE 78		Unconsciousness	Internal Injury: Head, Neck or None	Thorax	Abdomen	Other	Cerebral Concussion	Facial Injuries	Intra Oral Injuries	Eye Injuries							Person Sequence Number		Trans. Code	Card Number		
58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
7	8																0	1	A	2	9	0

CARD 30

Fractures

Group A: Cranial or None	Facial	Cervical	Thoracic	Lumbar	Sacral	Coccygeal	Shoulder Girdle	Rib	Group B: Pelvis or None	Upper Arm	Lower Arm	Hand incl. Fingers	Upper Leg	Lower Leg	Foot incl. Toes	Other Fractures
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

Dis-Locations

Group A: Jaw or None	Cervical Vertebral	Thoracic Vertebral	Lumbar Vertebral	Sacral Vertebral	Coccygeal Vertebral	Shoulder Girdle	Ribs	Pelvis	Group B: Shoulder or None	Elbow	Wrist	Hand Fingers	Hip	Knee	Ankle	Foot Toes	Other Dislocations	CARD CODE 79		
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
																		7	9	

Amputations/Avulsions: HEAD, NECK OR NONE	Trunk	Upper Extrem.	Lower Extrem.	Other	Soft Tissue Injuries, Group A: LACERATIONS OR NONE	C.S.S. Head	Abrasions Head	LACERAT NECK	C.S.S. Neck	Abrasions Neck	LACERAT THORAX	C.S.S. Thorax	ABRASIONS THORAX
50	51	52	53	54	55	56	57	58	59	60	61	62	63

Soft Tissue Injuries, Group B: LACERATIONS ABDOM/NONE	C.S.S. Abdomen	Abrasions Abdomen	LACERAT UP EXTR	C.S.S. UP EXTREME	ABRASIONS UP EXTR	LACERAT LOW EXTR	C.S.S. LOW EXTREME	ABRASIONS LOW EXTR	Other S.T. Injuries	Asphyxiation Suspected	Person Sequence Number		Trans. Code	Card Number		
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
														3	0	0

PERSONNEL 1 OF 2

AIRCRAFT 1 OF 2

CODE SHEET 10 OF 20

R&DP-20-1(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 1

Field	Card columns	Entry
RECORD IDENTIFICATION – Date – Cal. Yr.	01–02	68
RECORD IDENTIFICATION – Date – Mo.	03–04	12
RECORD IDENTIFICATION – Date – Day	05–06	Ø9
RECORD IDENTIFICATION – Type Report	07	1
RECORD IDENTIFICATION – Log Line Number	08–09	Ø1
RECORD IDENTIFICATION – Aircraft Number	10–11	Ø2
Source	12	1
Don't Count	13	
Enemy Action	14	
Aircraft Model – Mission Modif.	15–16	
Aircraft Model – Basic Mission	17	A
Aircraft Model – Design Number	18–20	ØØ7
Aircraft Model – Series Symbol	21	B
Model Code	22–23	Ø6
AIRCRAFT BUREAU NUMBER	24–29	1545ØØ
Reporting Custodian	30–32	2Ø6
Type Duty	33–35	321
Major Command	36	1
Time of Mishap – CONDITION	37	4
Time of Mishap – LOCAL TIME	38–41	2224
Acdt. Dmg.	42	C
Acft. Dmg.	43	C
Acdt. Inj.	44	G
Acft. Inj.	45	G
Hull Number	46–48	
Kind of Flight	49–51	3A3
Clearance	52	3
Location – NAME CODE	53–59	A1MIRMR
Location – Bearing From	60–61	
Location – Dist. From	62	A
FAC. RWAY DESCRIP. – Distance	63	
FAC. RWAY DESCRIP. – Area	64	
FAC. RWAY DESCRIP. – Runway Heading	65–66	24
FAC. RWAY DESCRIP. – Length	67	
WAS DUTY RWY USED?	68	1
FAC. SHIP DESCRIP. – Ship Type	69–70	
FAC. SHIP DESCRIP. – Ship Course	71	
FAC. SHIP DESCRIP. – Ship Speed	72–73	
LOC'N – Initial Contact	74	
LOC'N – Final Rest	75	
(unlabelled)	76	
Trans. Code	77	A
Card Number	78–80	Ø1Ø

CARD 2

Field	Card columns	Entry
RELATIVE WIND – Direction	12–13	
RELATIVE WIND – Velocity	14–15	ZZ
Density Altitude	16–18	
Alt. of Emergency – Above Terrain	19–21	AØØ
Alt. of Emergency – Pressure Altitude	22–24	
Acft. Gross Weight	25–28	ØØ25
(unlabelled)	29–30	
Fiscal Year	31–32	69
Fleets and Maws.	33–34	
(unlabelled)	35–49	
(unlabelled)	50–52	
PROPERTY DAMAGE COST – Gov't.	53–55	ØØØ
PROPERTY DAMAGE COST – Non Gov't.	56–58	ØØØ
Total Occupants This Acft.	59–60	Ø1
Aircraft Injury Summary – TOTAL INJURIES "A" "U" "L" – Navy	61–62	
Aircraft Injury Summary – TOTAL INJURIES "A" "U" "L" – Non Navy	63–64	
Aircraft Injury Summary – "A" Injuries – Navy	65–66	
Aircraft Injury Summary – "A" Injuries – Non Navy	67–68	
Aircraft Injury Summary – "U" Injuries – Navy	69–70	
Aircraft Injury Summary – "U" Injuries – Non Navy	71–72	
Aircraft Injury Summary – "L" Injuries – Navy	73–74	
Aircraft Injury Summary – "L" Injuries – Non Navy	75–76	
Trans. Code	77	A
Card Number	78–80	Ø2Ø

AIRCRAFT 2 OF 2

CODE SHEET 11 OF 20

R&DP-20-2(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 3

RECORD IDENTIFICATION					
Date: Cal. Yr. (01-02)	Date: Mo. (03-04)	Date: Day (05-06)	Type Report (07)	Log Line Number (08-09)	Aircraft Number (10-11)
6 8	1 2	Ø 9	1	Ø 1	Ø 2

Aircraft Injury Summary (cont'd)														
"B" Injuries Navy (12-13)	"B" Injuries Non Navy (14-15)	"C" Injuries Navy (16-17)	"C" Injuries Non Navy (18-19)	"D" Injuries Navy (20-21)	"D" Injuries Non Navy (22-23)	"E" Injuries Navy (24-25)	"E" Injuries Non Navy (26-27)	"F" Injuries Navy (28-29)	"F" Injuries Non Navy (30-31)	"G" Injuries Navy (32-33)	"G" Injuries Non Navy (34-35)	Total Injuries Navy (36-37)	Total Injuries Non Navy (38-39)	No. Occupants All Acft. Involved (40-42)
										Ø 1		Ø 1		Ø Ø 2

ESCAPE SYS. DATA: Sys. (43)	Comp-onent (44-45)	Spec. Data (46-49)	(50-59)	Component Separated From Aircraft (60-61)	Pri Acdt. Type (62-63)	Pri Phase of Operation (64-66)	1st Acdt. Type (67-68)	1st Phase of Operation (69-71)	2nd Acdt. Type (72-73)	2nd Phase of Operation (74-76)	Trans. Code (77)	Card No. (78-80)
							A 2	5 3 3			A	0 3 0

CARD 4

(12-13)	3rd Acdt. Type (14-15)	3rd Phase of Operation (16-18)	Type Operations (19-20)	Contributing Causes (21-27)	Pilot Error Causal Fac.: First (28-29)	Second (30-31)	Third (32-33)	Pilot Factor After Fact (34-35)	Other Personnel Causal Factor: First (36-37)	Second (38-39)	Third (40-41)	Other Pers. Factor After Fact (42-43)	Inv. Mat. Comp. 1st Causal Factor: Cross Ref. (44)	Compo-nent (45)	Ass'y. (46-47)	Sub Ass'y. (48-49)
			3 2						A 7	E 1	3 2					

Involved Mat. Comp. (cont'd.) 2nd Causal Factor: Cross Ref. (50)	Compo-nent (51)	Ass'y. (52-53)	Sub Ass'y. (54-55)	3rd Causal Factor: Cross Ref. (56)	Compo-nent (57)	Ass'y. (58-59)	Sub Ass'y. (60-61)	Material Fact. After Fact: Cross Ref. (62)	Compo-nent (63)	Ass'y. (64-65)	Sub Ass'y. (66-67)	Acft. Design Comp. Causal Factor: Cross Ref. (68)	Compo-nent (69)	Ass'y. (70-71)	Sub Ass'y. (72-73)	DESIGN C.F.: Special Equipment (74)	Pilot Equipment (75)	(76)	Trans. Code (77)	Card No. (78-80)
																			A	0 4 0

AIRCRAFT 2 OF 2

CODE SHEET 12 OF 20

R&DP-20-3(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 6

RECORD IDENTIFICATION											Weather Causal Factor						Facility Causal Factor	Facility Fact. After Fact	Environ. Factor									Cause + Factor Primary							Cause + Factor 1st Possible						
Date						Type Report	Log Line Number		Aircraft Number																			Misc							Misc.						
Cal. Yr.		Mo.		Day																								Wx				Fact			Wx						Fact
																												Pers				Factor			Pers						Factor
																												Mat	X Ref	COMP	Ass'y.	Sub Ass'y.			Mat	X Ref	COMP	Ass'y.	Sub Ass'y.		
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	2									M																						

Cause + Factor 2nd Possible							Cause + Factor 3rd Possible							Cause + Factor 4th Possible							Special Attention	Special Data and Conditions											Trans. Code	Card Number		
Misc							Misc							Misc																							
Wx						Fact	Wx						Fact	Wx						Fact																	
Pers						Factor	Pers						Factor	Pers						Factor																	
Mat	X Ref	COMP	Ass'y.		Sub Ass'y.		Mat	X Ref	COMP	Ass'y.		Sub Ass'y.		Mat	X Ref	COMP	Ass'y.		Sub Ass'y.																		
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	75	76	77	78	79	80
																						K												A	0	6	0

CARD 8

								Material Special Data																																	
								First				Second				Third				Fourth				Fifth				Maneu. Prior To Occur.	OPERATOR INCAPACITATED C.F.										
									Code				Code				Code				Code				Code															
12	13	14	15	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

																												Multi-Occurrences		Multi-Maintenance Problems		Trans. Code	Card Number		
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	75	76	77	78	79	80
																												0	8	0

AIRCRAFT 2 OF 2

CODE SHEET 13 OF 20

R&DP-20-4(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ___ REVIEWED ___ LOGGED: ___ PUNCHED: ___ VERIFIED: ___

CARD 9

RECORD IDENTIFICATION													Aircraft Data																										
Date						Type Report	Log Line Number		Aircraft Number		1st Flight After Maint.	D. I. R.	Tour	Hours Since Acceptance				Since Last Insp.						Since Last Par/O'Haul							Power Plant Model Number							
Cal. Yr.		Mo.		Day														Type	Hours			Days		Activity	Hours			Months										
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
6	8	1	2	0	9	1	0	1	0	2										9	4																	

Power Plant Serial Number										Primary Involved Material Component																											Trans. Code	Card Number		
										Manufacturers Part Number																Total Hours				Since Last Par/O'Haul										
																														Activity	Number	Hours								
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	75	76	77	78	79	80
																																					A	0	9	0

CARD 10

Pri. Inv. Mat. Comp. (cont'd)						Possible or Secondary Involved Material Component																															
Since Last Check Perf.						Manufacturers Part Number																Total Hours				Since Last Par/O'Haul						Since Last Check Perf.					
Type	Hours			Days																						Activity	Number	Hours				Type	Hours			Days	
12	13	14	15	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

																											Trans. Code	Card Number		
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	75	76	77	78	79	80
																												1	0	0

AIRCRAFT 2 OF 2

CODE SHEET 14 OF 20

R&DP-20-6(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 11

RECORD IDENTIFICATION										
Date						Type Report	Log Line Number		Aircraft Number	
Cal. Yr.		Mo.		Day						
01	02	03	04	05	06	07	08	09	10	11
6	8	1	2	0	9	1	0	1	0	2

Controlling LSO's Carrier Pass Description																											
Start							Middle							In-Close							Ramp						
Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position	Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position	Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position	Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39

CLCPD (cont'd) TOUCH-DOWN																																								
Alt.	Speed	Speed Modif.	Line-Up	Line-Up Modif.	Power	Nose Position																															Trans. Code	Card Number		
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	75	76	77	78	79	80
																																						1	1	0

CARD 12

12	13	14	15	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

												File or Serial Number (Pilot)							Rank/Rate	Br. of Service	Age	Yrs. D.N.A.	Status	Position	Inj. to Indiv.	Abandon A/C	Trans. Code	Card Number		
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	75	76	77	78	79	80
												0	7	1	1	8	0	5	5	2	5	1	A	1	G	1	A	1	2	0

AIRCRAFT 2 OF 2

CODE SHEET 15 OF 20

R&DP-20-7(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 13

Record Identification: Date – Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number		Pilot Factor Inv.	Service Tour	Instrument Card
01	02	03	04	05	06	07	08	09	10	11	12	13	14
6	8	1	2	Ø	9	1	Ø	1	Ø	2	2		

Emerg. Syst. Train. – Last 6 Months		Last 12 Months		Instrument Trainer – Last 6 Months		Last 12 Months		Time All Models – Total		Last 3 Months		Time This Model – Total		Last 3 Months	
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
		1	2			Ø	2	Ø	5	1	2	1	5	1	2

Inst. Hours Last 3 Months		Nite Hours Last 3 Months		Total Jet or Helo Time		Number of → Total	Day	Nite	Total Day This Model	
31	32	33	34	35	36	37	38	39	40	41
1	Ø	3	9	3	2	3	2	Ø	1	7

Carrier Landings – Total Nite This Model		This Model Day Last 30 Days		This Model Nite Last 30 Days									
42	43	44	45	46	47	48	49	50	51	52	53	54	55
Ø	6												

File or Serial Number (Co-Pilot)									Rank/Rate	Br. of Service	Age	Yrs. D.N.A.
56	57	58	59	60	61	62	63	64	65	66	67	68

Status	Position	Inj. to Indiv.	Abandon A/C	Pilot Factor Involved	Service Tour	Instr. Card		Trans. Code	Card Number		
69	70	71	72	73	74	75	76	77	78	79	80
								A	1	3	Ø

CARD 14

Emerg. Syst. Train. – Last 6 Months		Last 12 Months		Instrument Trainer – Last 6 Months		Last 12 Months		Time All Models – Total		Last 3 Months		Time This Model – Total		Last 3 Months	
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

Inst. Hours Last 3 Months		Nite Hours Last 3 Months		Total Jet or Helo Time		Number of Carrier Landings – Total	Day	Nite	Total Day This Model		Total Nite This Model		This Model Day Last 30 Days		This Model Nite Last 30 Days						
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49

					File or Serial Number (Instr. Plt. in Other A/C)							Rank/Rate	Br. of Service	Age	Yrs. D.N.A.
50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65

Status	Position	Inj. to Indiv.	Abandon A/C	Pilot Factor Involved	Service Tour	Instr. Card					Trans. Code	Card Number		
66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
												1	4	Ø

AIRCRAFT 2 OF 2

CODE SHEET 16 OF 20

R&DP-20-8(1/68)

AVN NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 15

RECORD IDENTIFICATION											Emerg. Syst. Train.				Instrument Trainer				Time All Models				Time This Model										Number of Carrier →						
Date																																							
Cal. Yr.		Mo.		Day		Type Report		Log Line Number		Aircraft Number	Last 6 Months		Last 12 Months		Last 6 Months		Last 12 Months		Total		Last 3 Months		Total		Last 3 Months		Inst. Hours Last 3 Months		Nite Hours Last 3 Months		Total Jet or Helo Time		Total		Day		Nite		Total Day This Model		Total Nite This Model	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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	
6	8	1	2	0	9	1	0	1	0	2																																				

Landings																																															
This Model Day Last 30 Days		This Model Nite Last 30 Days				This Individual in Acft.		Name (Instr. Plt. in Other Acft.)																					Number of Personnel Records										Trans. Code		Card Number		
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	75	76	77	78	79	80							
																													0	1							A	1	5	8							

CARD 16

P								File or Serial Number (All Persons)							Name											Rank/Rate	Br. of Service	Age	Yrs. Exper.	Status	Position	Inj. to Indiv.	Abandon A/C	Card Code 65						
12	13	14	15	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		
P								(b) (6) [redacted]																	5	2	5	1	A	1	G	1	6	5					

Equip 1						Equip 2						Equip 3						Equip 4									Card Number		
Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip.	Problem or Condition	Phase Existed	Special Data		Basic Equip.	Spec. Equip	Problem or Condition	Phase Existed	Special Data		Person Sequence Number	Trans. Code				
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	75	76	77	78	79	80
																									0	1	A	1	6	8

PERSONNEL 2 OF 2

AIRCRAFT 2 OF 2

CODE SHEET 12 OF 20

RBDP-20-11(1/68)

NAVSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 21

RECORD IDENTIFICATION											Equip 45						Equip 46						Equip 47						Equip 48										
Date																																							
Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number		Basic Equip.	Spec. Equip	Problem or Condition		Phase Existed	Special Data	Basic Equip.	Spec. Equip.	Problem or Condition		Phase Existed	Special Data	Basic Equip.	Spec. Equip.	Problem or Condition		Phase Existed	Special Data	Basic Equip.	Spec. Equip.	Problem or Condition		Phase Existed	Special Data	Card Code 66		ACFT DESCRIPT	MISHAP DESCRIPTOR	Topog.at Mishap
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	2																									6	6	A	F	A

Type of Egress	Eject. Info.								Egress Problems									Type/Mod. Eject. Seat		Firing Method Seq. Eject.	Seat Position	Attitude/Maneu. A/C at Exit	Altitude When Ejected	Airspeed			Weight			Alt. Chute Open	In Crash Area	Time In Water		Person Sequence Number		Trans. Code	Card Number		
									Prior			During			Subsequent																								
									Prob	Prob	Prob	Prob	Prob	Prob	Prob	Prob	Prob																						
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	75	76	77	78	79	80
K																																		0	1	A	2	1	0

CARD 22

Time in Raft		Vertebral Fractures				Eject. Fatal Causes		Injury	Combat Zone									Card Code 67		Wind Velocity in Knots		Wave Height	Wave Interval in Seconds	Visibility	Air Temperature		Water Temperature		Alerting Factors			Located Site	Survivor Left Site	Means of Locating			
						Pri.	Sec.																						1st Factor	2nd Factor	3rd Factor							
12	13	14	15	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
								G										6	7					2	4	8			H			G		A	D		

Survival Factors		Fatals Time Lapse From:			Time Lapse Last Training				Training Factors																Person Sequence Number		Trans. Code	Card Number		
		Mishap to Site Locat.	Site Locate to Victim	Mishap to Death	Low Press. Chamber	Eject. Tower	Eject. Seat	Survival																						
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	75	76	77	78	79	80
					C	C	C	C	B																0	1	A	2	2	0

PERSONNEL 2 OF 2

AIRCRAFT 2 OF 2

CODE SHEET 18 OF 20

NAVAVNSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED: ____

CARD 25

RECORD IDENTIFICATION: Date: Cal. Yr.		Mo.		Day		Type Report	Log Line Number		Aircraft Number		Survivor's Problems				Survivor's Condit.: During	After	Time Lapse Reach to Rescue		Time Lapse Mishap to Rescue Completion		Rescue Recommend		CARD CODE 73		Weight			Height		Age		Sitting Height Nearest 1/4 Inch			Trunk Height Nearest 1/4 Inch			Functional Reach Nearest 1/4 Inch		
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	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
6	8	1	2	0	9	1	0	1	0	2													7	3	1	7	0	7	3	2	4	3	8	1	2	7				

Buttock Knee Nearest 1/4 Inch			Leg Length Nearest 1/4 Inch					Bideltoid Nearest 1/4 Inch			CARD CODE 74		Role of Indiv. in Cause	Supervisory Factors: Inadequate Briefing	ORD/LEFT ON FLT BEY CAP	Poor Crew Coordination	Other	Pre-Flight Factors: Faulty Flight Plan	Faulty A/C Pre-Flight	Faulty Prep. Pers. Equip.	Hurried Departure	Delayed Departure	Inadequate Wx. Analysis	Other	Experience Trng. Factors: Inadequate Transition	LIMITED TOTAL EXPERIENCE	LIMIT RECENT EXPERIENCE	FAIL TO USE ACCEPT PROC.	Other				Person Sequence Number		Trans. Codes	Card Number		
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	75	76	77	78	79	80
2	4	1	4	5	1			1	8	3	7	4																					0	1	A	2	5	1

CARD 27

Design Factors: Design of Inst/Controls	Location of Inst/Controls	Failure of Inst/Controls	COCKPIT LIGHTING	Runway Lighting	Lighting Other A/C	PERSONAL EQU INTERFERENCE	WORK SPACE INCOMPAT. W/MAN	Other	Communication Problems: MISINTERPRET COMM	DISRUPTED COMM	Language Barrier	Noise Interference	Other	Environmental Factors: ACCELERATION FOR IN FLIGHT	DECOMPRESSION	Vibration	Glare	Smoke Fumes	Heat	Cold	Wind Blast	Visibility Restrictions: Wx Haze Dark	Icing Window Fog	DUST WIND SMOKE	WX OTHER THAN VISIBILITY	Other	CARD CODE 75		Psycho Physiological Factors: Food Poisoning	Motion Sickness	Other Acute Illness	OTH PRE EXIST DISEASE/DEFECT	Get "Homeitis"	Hangover	Sleep Deprivation	FATIGUE, OTHER	Missed Meals
12	13	14	15	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
																							A				7	5									

Psycho Physiological Factors (cont'd): DRUGS PRESCR MEDICAL DR.	Drugs, Other	Alcohol	Visual Illusions	HALLUCINATIONS	UNCONSCIOUSNESS	DISORIENTATION VERTIGO	Hypoxia	Hyper-Ventilation	Dysbarism	CO Poisoning	Boredom	Inattention	Channelized Attention	Distraction	PREOCCUPATIN PERS. PROB.	EXCESSIVE MOTIVATION TO SUC	Over Confidence	Lack of Self-Confidence	LACK OF CONFIDENCE IN EQUIP	Apprehension	Panic	Other			Person Sequence Number		Trans. Codes	Card Number		
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	75	76	77	78	79	80
																									0	1	A	2	7	1

PERSONNEL 2 OF 2

AIRCRAFT 2 OF 2

CODE SHEET 19 OF 20

NAVAVNSAFECEN MISHAP CODE SHEET

(COMMON TO BOTH CARDS) CODED: ____ REVIEWED ____ LOGGED: ____ PUNCHED: ____ VERIFIED ____

CARD 29

Group	Field	Col.	Entry
Record Identification – Date	Cal. Yr.	01	6
		02	8
	Mo.	03	1
		04	2
	Day	05	0
		06	9
Record Identification	Type Report	07	1
	Log Line Number	08	4
		09	1
	Aircraft Number	10	0
		11	2
Other Factors To Be Considered	Habit Interfr Wrong Cont.	12	
	Compus of Contr. Other	13	
	Misread Instruments	14	
	Misinterpret Instruments	15	
	Misled by Faul Instrum.	16	
	Vis. Rest. by Equip. Struct.	17	
	Task Over-Saturation	18	
	Inadequate Goal/Timing	19	
	Misjudged Speed/Dist.	20	
	Wrong Course of Action	21	A
	Delay Taking Nec Action	22	
	Violation of Flt. Discip	23	
	Navigational Error	24	
	Inadvertent Operation	25	
	Other	26	
	CARD CODE 77	27	7
		28	7
	Disposition	29	
	Body Position	30	
	Direction Facing	31	
Physical Defects Post Crash Exam.	Visual Acuity or None	32	
	Hearing	33	
	Cardio-Vascular	34	
	Neuromuscul Skeletal	35	
	Gastro-Intestinal	36	
	Respiratory	37	
	Urogenital	38	
	Other Abnormal	39	
	Reason for Grounding	40	
	Estimated Duration of Grounding	41	
		42	
	Pri. Cause of Death Diagnosis Number	43	
		44	
		45	
		46	
Autopsy	Preformed	47	
	Protocol	48	
	Conducted By	49	
Lab Toxicological Test On	Blood or None	50	
	Urine	51	
	GI Contents	52	
	CNS Contents	53	
	Muscle Tissue	54	
	Visceral Tissue	55	
	Other	56	
	Ultra-Viol or Oth Special Investig	57	
	CARD CODE 78	58	7
		59	8
	Unconsciousness	60	
Internal Injury	Head, Neck or None	61	
	Thorax	62	
	Abdomen	63	
	Other	64	
	Cerebral Concussion	65	
	Facial Injuries	66	
	Intra Oral Injuries	67	
	Eye Injuries	68	
		69	
		70	
		71	
		72	
		73	
		74	
	Person Sequence Number	75	0
		76	1
	Trans. Code	77	A
	Card Number	78	2
		79	9
		80	0

CARD 30

Group	Field	Col.	Entry
Fractures – Group A	Cranial or None	12	
	Facial	13	
	Cervical	14	
	Thoracic	15	
	Lumbar	16	
	Sacral	17	
	Coccygeal	18	
	Shoulder Girdle	19	
	Rib	20	
Fractures – Group B	Pelvis or None	21	
	Upper Arm	22	
	Lower Arm	23	
	Hand Incl. Fingers	24	
	Upper Leg	25	
	Lower Leg	26	
	Foot Incl. Toes	27	
	Other Fractures	28	
Dis-Locations – Group A	Jaw or None	29	
	Cervical Vertebral	30	
	Thoracic Vertebral	31	
	Lumbar Vertebral	32	
	Sacral Vertebral	33	
	Coccygeal Vertebral	34	
	Shoulder Girdle	35	
	Ribs	36	
	Pelvis	37	
Dis-Locations – Group B	Shoulder or None	38	
	Elbow	39	
	Wrist	40	
	Hand Fingers	41	
	Hip	42	
	Knee	43	
	Ankle	44	
	Foot Toes	45	
	Other Dislocations	46	
	CARD CODE 79	47	7
		48	9
		49	
Amputations/Avulsions	Head, Neck or None	50	
	Trunk	51	
	Upper Extrem.	52	
	Lower Extrem.	53	
	Other	54	
Soft Tissue Injuries – Group A	Lacerations or None	55	
	C.S.S. Head	56	
	Abrasions Head	57	
	Lacerat Neck	58	
	C.S.S. Neck	59	
	Abrasions Neck	60	
	Lacerat Thorax	61	
	C.S.S. Thorax	62	
	Abrasions Thorax	63	
Soft Tissue Injuries – Group B	Lacerations Abdom/None	64	
	C.S.S. Abdomen	65	
	Abrasions Abdomen	66	
	Lacerat Up Extr	67	
	C.S.S. Up Extreme	68	
	Abrasions Up Extr	69	
	Lacerat Low Extr	70	
	C.S.S. Low Extreme	71	
	Abrasions Low Extr	72	
	Other S.T. Injuries	73	
	Asphyxiation Suspected	74	
	Person Sequence Number	75	
		76	
	Trans. Code	77	
	Card Number	78	3
		79	0
		80	0

PERSONNEL 2 OF 2

AIRCRAFT 2 OF 2

CODE SHEET 20 OF 20

R&DP-30(6/68)

REQUEST FOR DELETION OF RECORD OR CODING MODIFICATION FORM

FROM: RECORDS DEPT

DATE 16 JUN 1969

Chg in red DMA 6/6

TO: (1) CODING SECT
(2) REC CONT BRANCH
(3) ADPE DIV
(4) REC CONT BRANCH

TRANSACTION CODES

D-Deletion of the entire MISHAP Master Record (use only cc 1-11 and code D in cc 77).

M-Modifying contents of any Master Record field. Use "ØØ" in Person Seq No. field, if field to be modified is in the Gen Data Sect of the Master Record. Otherwise use Person Seq No. for the individual for which the change is to be made. These changes must be in Person Seq No. order.

IDENTIFICATION NO.										
YEAR		MONTH		DAY		TYP-RPT	LOG NUMBER		AIRCRAFT NUMBER	
01	02	03	04	05	06	07	08	09	10	11
6	8	1	2	Ø	9	1	Ø	1	Ø	2

	FIELD NAME	CARD NUMBER	CARD COL OF FLD START ADD.	FIELD'S STARTING ADDRESS				PERSON SEQ NUMBER		FIELD LENGTH		DATA TO BE INSERTED (LEFT JUSTIFIED)										TAPE REC DIV NO.		TRANS CODE
				12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29			
1	OTHER PERS CAUS FACT	Ø4	4Ø	Ø	2	3	7	Ø	Ø	Ø	2	3	2											
				30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47			
2																								
				48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	77
3																						Ø	1	M

NOTE: (1) For deletions of codes in a given field, leave the "DATA TO BE INSERTED" field blank and use "TRANS CODE" M in cc 77.

(2) Only corrections applying to personnel in one TAPE RECORD DIV may be shown on a single CHANGE REQUEST form.

(b) (6) [redacted]

ORIGINATOR'S SIGNATURE

R&DP-20-16(1/68)

I.D. Number	68	12	09	10	1		N	N	N	1				22 ~~18~~	A	
	Yr.	Mo.	Day	Typ	Seq	Typ Rec	Num Pos			Ccs	Orig. Unit			Loc/Cus	Data Code	

Common Fields on All Cards

CLASS CODE: 1 - Non-Class, 2 - Conf

TYPE BRIEFS — CODES: 1 - GEN. MISHAP, 2 - BIO-MED, 3 - SAF-SURV, 4 - PSYCHO

CARD NO. 11 12 — CODED BNB 2/11 — REVIEWED CL — KEY PUNCHED — VERIFIED

COLL AT NIGHT LAN ROLLOUT. AFTER GND FOG LIFTED, FMLP
FLT LAUNCHED. AS FLT CONTINUED, FOG BANK FORMED END
DUTY RWY. TWR REQ LSO RECOVER ACFT FINAL LAN. 1ST ACF
T MET FOG VICINITY 10M FT MARK & CLEARED RWY AS #500
LAN. 500 LAN, MET FOG @ 5-6M FT-TO-GO. PLT TOLD TWR N
OT CLEAR RWY & UNSURE POSIT. NEXT ACFT LAN PORT SIDE
RWY WITH HARD BRAKING TELLING #498 AFT TO LAN CENLINE
. 498 LAN CENLINE WITH LIGHT TO MODERATE BRAKING AS F
OG ENTERED. 498 PASSED ACFT ON PORT SIDE RWY @ 4M FT
MARK, COMMENCED HEAVY BRAKING. WHEELS LOCKED 120 FT P
RIOR IMPACT STBD WING WITH TAIL SECTION 500. BOTH PLT
S EGRESS NORM. NO FIRE. CRASH CREW 15 MINUTES DELAY D
UE FOG. REMAINDER FLT LAN PARALLEL RWY, FLD CLOSED. P
RI- PLT 498- POOR BRAKING TECHNIQUE. CONTRIB- PLT 498
- FAILED RECOGNIZE DANGEROUS SITUATION, FAILED COMPLE
TE LAN CK LIST BY NOT USING FULL FLAPS. OTHER PERS- S
UPV- COMMAND LEVEL- CONTINUED FMLP IN POOR WX DUE PRE
-DEPLOYMENT TRAINING REQUIREMENTS OTHER PERS- CONT P
ERS- TOWER FAILED ENSURE PROPER LAN INTERVAL FOR EXIS
TING VIS. OTHER PERS- PLTS IN FMLP PATTERN- FAILED GI

CARD NO. 11 12

— CONTINUED —

NAVSAFECEN 3750-1/22 (REV. 5/69)

GENERAL DATA SECTION NARRATIVE BRIEF

I.D. Number	1 2 Yr.	3 4 Mo.	5 6 Day	7 Typ	8 9 Log	10 Typ Brief	13 14 15 Narr File I.D.	69 C.L.	70 71 72 73 Orig. Use	75 76 Tot-Cds	77 78 Trans. Code
	68	12	09	1	01	1	N N N	1			A

Common Fields to All Cards

CLASS CODE
1 - Non-Class
2 - Conf.

CARD NO. CODED _____ REVIEWED _____ KEY PUNCHED _____ VERIFIED _____

CARD NO. (11 12)	Narrative (16–68)
21 ~~01~~	VE TIMELY WRNG TO TWR & LSO OF FOG MOVEMENT, FAILED E
22 ~~02~~	ESTABLISH PROPER LAN INTERVAL FOR REDUCED VIS CONDIT.
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

CARD NO. (11 12)

R&DP-20-16(1/68)

I.D. Number	1 2 Yr.	3 4 Mo.	5 6 Day	7 Typ.	8 9 Log	10 Typ. Brief	13 Nam. File I.D.	69 Cl.	70 71 72 73 Orig. Use	75 76 Tot-Cds	77 Trans. Code
	6 8	1 2	0 9	1 0	1	2	N N N	1		0 8	A

Common Fields to All Cards

CLASS CODE
1 - Non-Class
2 - Conf

TYPE BRIEFS

CODES
1 - GEN. MISHAP
2 - BIO-MED
3 - SAF-SURV
4 - PSYCHO

CARD NO. CODED _____ REVIEWED _____ KEY PUNCHED _____ VERIFIED _____

11 12	
01	THE 1ST ACFT OF A 3 PLANE FLT LAN & ROLLED INTO DENSE
02	FOG ON THE DISTAL END OF RWY. THE PLT PULLED THE ACF
03	T TO RIGHT & SLOWED TO ABOUT 5 KNOTS. THE 2ND ACFT LA
04	N, ENTERED FOG & ROLLED TO A COMPLETE STOP ON LEFT SI
05	DE OF RWY. THE THIRD ACFT LAN ENTERED FOG & DURING RO
06	LL OUT STRUCK REAR OF 1ST ACFT. THE MOR INDICATES THA
07	T IN ADDITION TO PLT'S DECISION TO REMAIN ON DUTY RWY
08	.
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

CARD NO.

NAVAL SAFETY CENTER
NAVAL AIR STATION
NORFOLK, VIRGINIA 23511

111B3/gr
3750/2
Ser 1218
12 June 1969

SPECIAL HANDLING REQUIRED IAW OPNAVINST 3750.6 SERIES
FOR OFFICIAL USE ONLY

From: Commander, Naval Safety Center
To: Commanding Officer, Attack Squadron TWENTY-FIVE

Subj: VA-25 AAR ser 1-69A concerning A-7B's BuNo's 154498/154500 accident occurring 9 December 1968, pilots (b) (6) [redacted]

1. The subject report and all endorsements have been reviewed. Concur with the comments and recommendations of the Aircraft Accident Board as modified by subsequent endorsers.

2. The cause factors contributing to this accident have been recorded as follows:

a. OTHER PERSONNEL:

(1) SUPERVISORY (command level--continued FMLP in poor weather due to pre-deployment training requirements).

(2) PILOTS IN FMLP PATTERN:

(a) Failed to give timely warning to tower and LSO regarding fog movement.

(b) Failed to establish proper landing interval for reduced visibility conditions.

(3) CONTROLLING PERSONNEL (failed to ensure proper landing interval for existing visibility).

b. PILOT BuNo 154498:

(1) Failed to recognize dangerous situation.

(2) Failed to complete checklist by not utilizing full trailing edge flaps.

*(3) Improper braking technique.

111B3/gr
3750/2
Ser 1218
12 June 1969

SPECIAL HANDLING REQUIRED IAW OPNAVINST 3750.6 SERIES
FOR OFFICIAL USE ONLY

3. WEATHER (ground fog) has been recorded an an environmental factor in this mishap.

*Primary

(b) (6) [redacted]

By direction

Copy to:
NAVAIRSYSCOMHQ (AIR 09E) (2)
COMNAVAIRPAC
COMFAIRALAMEDA
CO NAS MIRAMAR
COMCVW-16
NAVPRO DALLAS
COMNAVAIRTESTCEN

R&DP-8 (11-67)

DEPARTMENTAL 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 DPEARTMENT: None

HRD 126
INITIAL/CODE

AERO-MED DEPARTMENT: No Comment NWP

No Spec A.M. comment /JL

INITIAL/CODE

&DP-7 (11-67)

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		
	511 / 4-1-69	ORIGINAL REC'D RB	/
	/	had called released 4/7/69 sh	/
	/		/
511	512 / 8-15-70	FINAL REVIEW AND CLOSE OUT COMPLETED, FILE IN CLOSED FILE. VR 8TB	/
	/		/
	/		/
	/		/
	/	CLOSED	/
	/		/
	17 AUG 1970		/
	/		/
	/		/
	/		/
	/		/
	/		/
	/		/

R&DP-27(4/68)

UNIT VA-25/VA-25
Count A/C → MODEL A7B/A7B
BUNO 154498/154500

AAR REVIEW ROUTING SHEET

ADVANCE ROUTING

PRI	DEPT	DATE IN	DATE OUT	INIT	INTER-DEPT ROUTING:
	M&M		4.18.69	0	
	AERO-MED	4-9-69	4-4-69	JWP	DO NOT ROUTE

DEPARTMENT REPRESENTATIVES INITIALS FOR RECEIPT OF REPORTS:
REMARKS:

ORIGINAL ROUTING

DEADLINE DATE OUT OF NAVAVNSAFECEN 1 MAY 1969
EXTENSIONS

DEPT	DATE IN	DEPT DEADLINE	DATE OUT	INIT	INTER-DEPT ROUTING
11183 AOA	2 April		6-11-69	RKC	

NAVAVNSAFECEN ENDORSEMENT ROUTING

PRI	DEPT	DATE IN	DATE OUT	INIT
1	R&DP			
2	M&M			
3	ADMIN			

AMA 6/16/69

ROUTING AFTER CLOSE-OUT

DEPT	DATE IN	DATE OUT	INIT	INTER-DEPT ROUTING
AERO-MED				

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.

DAMAGED AIRCRAFT CONDITION AND DISPOSITION REPORT
NAVAER-2980 (Rev. 6-59)

Aer-Rep NA-73

Submit original and one copy without letter of transmittal to the cognizant Bureau of Aeronautics Maintenance Representative and one copy to the following activities: (1) NAVAVNSAFEACTY NAS Norfolk, (2) Controlling Custodian, (3) OSR, (4) Reporting Custodian, (5) Log Book, (6) Controlling Activity (if ferry aircraft), (7) ComNAB, (if ferry or other transient aircraft and a ComNAB is concerned), and (8) Ferry Squadron, (if concerned).

FROM: Commanding Officer, Naval Air Rework Facility, Alameda	SERIAL NUMBER: 5-69	DATE: 5-12-69
TO: Naval Air Systems Command Representative, Pacific		

REFERENCE
(a)- LATEST ISSUE OF BUAER INSTRUCTION NAVAER 00.30 (b)

DATE OF ACCIDENT OR DAMAGE: 12-9-68	LOCATION OF AIRCRAFT: NARF Alameda		REPORTING CUSTODIAN: NAVAIRSYSCOM (FS)			
AIRCRAFT MODEL: A-7B	SERVICE TOUR: 1	ENGINE MODEL: TF-30-P8				
BUREAU NUMBER: 154498	MONTHS THIS SERVICE TOUR: 3	ENGINE DATA	PORT		STARBOARD	
STATUS (Flyable, non-flyable): Non-Flyable	FLIGHT HOURS THIS MONTH: 0	ENGINE BUREAU NUMBER	664357			
ACCEPTANCE DATE: 10-14-68	FLIGHT HOURS THIS TOUR: 101.0	TIME ON ENGINE(S) SINCE NEW	14.1			
TOTAL OVERHAULS: 0	FLIGHT HOURS SINCE NEW: 111.	TIME ON ENGINE(S) SINCE OVERHAUL	14.1			

DETAILED DESCRIPTION OF DAMAGE AND REMARKS

SEE ATTACHED SHEET

ESTIMATED COSTS OF LABOR AND MATERIAL NECESSARY TO PLACE AIRCRAFT IN COMPLETE SERVICEABLE CONDITION

TOTAL MANHOURS	DIRECT	11,000
	INDIRECT	
TOTAL MANHOUR COST		$ 126,500
NON-REPAIRABLE ASSEMBLIES COST		$ 15,000
MATERIAL COST		$ 60,000
SHIPPING OR TRANSPORTING TO OSR		$
TOTAL COST		$ 201,500

RECOMMENDED DISPOSITION
Recommend this aircraft be scheduled for crash-damage overhaul and completion in second quarter FY 70. Request authority to recommence first-service tour upon completion of overhaul.

The following preparatory work shall be accomplished by the operating unit prior to acceptance by the Overhaul and Repair Department for repair:

a. Remove ammunition, pyrotechnics and ejection seat charge.
b. Remove spare and loose gear.
c. Preserve engine(s).
d. Drain and purge fuel cells and disconnect battery.
e. Bring log books up-to-date and deliver with aircraft.
f. Inventory aircraft and retain copy for reference.

ESTIMATED INDUCTION DATE FOR REPAIR (Contingent on availability of material)	ESTIMATED COMPLETION DATE
COPY TO: NAVAVNSAFEACTY NAS Norfolk; Controlling Custodian NAVAIRSYSCOMHQ (AIR 4221C); COMFAIR ALAMEDA	SIGNA (b) (6) [redacted]
	SIGNATURE (b) (6) [redacted] By direction

DAMAGED AIRCRAFT CONDITION AND DISPOSITION REPORT SER NR 5-69 OF 5-12-69

Examination of A-7B BUNO 154498 disclosed the following:

1. Structural damage:

(a) Fuselage right side skins, formers, frames, bulkheads buckled and torn from Sta FS-210 aft to Sta FS-375.

(b) Fuselage left side skin buckled and torn at Sta FS-370.

(c) Wing to fuselage fitting sheared (P/N 215-30411-5).

(d) Fuselage to wing fittings (fuselage bulkheads) require dye-penetrant inspection.

(e) Wing to fuselage fittings (center wing ribs) require dye-penetrant inspection.

2. Components damaged beyond repair:

(a) Right wing outer panel assembly, P/N 215-80020-2.

(b) Tank assembly, 300 gallon external fuel, P/N 225-48000-89.

(c) Miscellaneous fuel, hydraulic and pneumatic tube assemblies, valves and fittings.

3. Components requiring repair and/or replacement:

(a) Right flap assembly, wing leading inboard, P/N 215-70200-2.

(b) Left flap assembly, wing leading inboard, P/N 215-70200-1.

(c) Right flap assembly, wing training edge, P/N 215-70300-2.

(d) Pylon assembly, Sta 6, P/N 215-99021-12.

(e) Pylon assembly, Sta 7, P/N 215-99021-10.

(f) Pylon assembly, Sta 8, P/N 215-99021-8.

(g) Ejector Rack (MAU9AA59A63J2-1

4. Engine requires replacement, Foreign Object Damage.

ATTACK SQUADRON TWENTY FIVE
FLEET POST OFFICE
SAN FRANCISCO 96601

A7

AKC

VA25:02
3750
Ser 148
14 MAR 1969

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

From: Commanding Officer, Attack Squadron 25, FPO San Francisco 96601
To: Commander, Naval Safety Center, Naval Air Station, Norfolk, Virginia 23511
Via: Commander, Naval Air Force, U. S. Pacific Fleet, Naval Air Station, North Island, San Diego, California 92135

Subj: ATKRON 25 AAR Serial 1-69A; comments concerning

Ref: (a) COMFAIRALAMEDA ltr Ser 80/838 of 5 Mar 69

1. During the course of investigation and analysis of subject accident, the Board did, in fact, consider the actions of each pilot in the flight in light of preventing the accident. LTJG (b) (6) stated that he transmitted on tower frequency the fact that he was not clear of the runway and was in the fog shortly after LTJG (b) (6) first requested permission to land. Shortly thereafter, LTJG (b) (6) saw the turnoff at 2,000 feet-to-go and transmitted his intentions to make a left 270 degree turn as he had rolled just beyond the turnoff. During this time LTJG (b) (6) was cleared to land while he was on final. LTJG (b) (6) switched to ground control after he cleared the runway and did not know of the collision until sometime later. LTJG (b) (6) considered that his transmissions concerning the lack of visibility, and the fact that he was still attempting to clear the runway while others were requesting permission to land were sufficient indication to all concerned that the visibility was restricted, the runway was not clear, and increased separation would be advisable. It is obvious that LTJG (b) (6) was quite busy while looking for the turnoff and then executing a 270 degree turn in the fog. It is felt that his transmissions were both adequate and commendable. They were not, however, acknowledged by the tower personnel. LTJG (b) (6) states that he did hear LTJG (b) (6) transmissions and he assumed that he was clearing the runway at the time he was touching down. As stated in the AAR, none of the pilots, nor the tower personnel could comprehend just how dense the fog was until everyone concerned had more or less comitted themselves to one course of action, that being rolling out after landing.

2. The AAR did not include LTJG (b) (6) statement as it was felt that the analysis adequately described his actions concerning this accident. The foregoing paragraph should clarify any questions concerning this intended omission.

(b) (6)

Copy to:
COMFAIRALAMEDA
COMNAVSAFECEN (2)
COMNAVAIRPAC
NAVAIRSYSCOMHQ (AIR-09E)
NAVAIRTESTCEN
NAVPLANTREPO DALLAS
CO, MIRAMAR
COMATKCARAIRWING 16

3750
80/ 2366

24 MAR 1969

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH OPNAVINST 3750.6 SERIES

FIFTH ENDORSEMENT on VA-25 AAR ser 1-69A concerning 2 A7Bs
BuNos 154500/154498 accident occurring 9 Dec 68, pilots (b) (6) [redacted]

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

Subj: VA-25 AAR ser 1-69A

Encl: (19) CO ATKRON TWO FIVE ltr ser 148 of 14 Mar 69

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

2. The supplemental information requested by the fourth endorser has been attached as enclosure (19). LTJG (b) (6) [redacted] transmission to the effect that he had not cleared the runway and that the fog was very dense, was not acknowledged by the tower. This fact, whether due to communications or personnel error would have been the factor which could have prevented the accident.

(b) (6)
[redacted]

By direction

Copy to:
NAVAIRSYSCOMHQ
COMFAIRALAMEDA
COMATTCARAIRWING SIXTEEN
CO ATKRON TWO FIVE
CO NAS MIRAMAR
NAVPLANTREPO DALLAS
COMNAVAIRTESTCEN

FF7-2/3750
Ser 80/ 338
5 MAR 1969

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH
OPNAVINST 3750.6 SERIES

FOURTH ENDORSEMENT on VA-25 AAR SER 1-69A concerning A-7 BUNO 154500 and 154498, occurring 9 Dec 68, Pilots (b) (6) [redacted]

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

Subj: ATKRON-25 AAR Serial 1-69A; forwarding of

1. Forwarded, concurring in general with the conclusions and recommendations of the Board and subsequent endorsers.

2. It is noted in the sequence of events that the tower personnel followed standard operating procedures based on the best information available to them at that time. That the information was inadequate is obvious from the results. It is further noted that the one person in position immediately prior to the accident, LTJG (b) [redacted] pilot of AH504, either failed to comment on visibility restrictions or it was not considered in the accident analysis. Conceivably a report on his part could have alerted the tower and airborne pilots to the hazardous situation in time to alter landing intervals and roll-out procedures. By copy of this endorsement, the Commanding Officer, ATKRON-25 is requested to comment on this apparent omission.

R. E. BREEN, Jr.
Chief of Staff

Copy to:
COMNAVSAFECEN (2)
NAVAIRSYSCOMHQ (AIR-09E)
COMNAVAIRPAC
NAVAIRTESTCEN
NAVPLANTREPO DALLAS
CO, NAS MIRAMAR
COMATKCARAIRWING 16
CO, VA-25

AS
Ser 228
14 February 1969

THIRD ENDORSEMENT on VA-25 accident serial 1-69A, concerning A-7s BUNO's 154500 and 154498, of 9 Dec 1968, pilots (b) (6) [redacted]

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

Subj: VA-25 Aircraft Accident Report 1-69A; forwarding of

1. Forwarded, concurring in general with the conclusions and recommendations of the board and subsequent endorsers.

2. As is frequently the case in accidents of this type, the elimination of any one of several factors would probably have averted the mishap. The original decision to commence flight operations under the existing weather conditions was a calculated risk of some degree, justified only by the operational exigencies involved. Once commenced, the second crucial point in the sequence of events was the point at which the decision was made to terminate flight operations. Although all the pilots' statements indicate that they were aware of the fog and its movement toward the field, only one pilot report was made. Immediate action was then taken to recover all aircraft. Although the decision to terminate flight operations under the circumstances was a joint responsibility shared by the tower, LSO and pilots in the pattern, earlier reports from the airborne pilots, who had the best vantage point from which to observe the progress of the fog, could have altered the outcome.

3. Recommendation 2 in Part IX, regarding reverting back to FAA separation criteria, is covered by existing instructions. NAS MIRAMAR Instruction P3710.1F requires a minimum ceiling and visibility of 600 feet and two miles, respectively, for the conduct of FCLP under special VFR conditions. When the visibility is less than two miles standard instrument separation criteria apply.

4. A second transmissometer has been requested, and upon delivery will be installed at the western end of the field.

Armistead B. Smith, Jr.
ARMISTEAD B. SMITH, Jr.

Copy to:
COMNAVSAFECEN(2)
NAVAIRSYSCOMHQ(AIR-09E)
COMNAVAIRPAC
NAVAIRTESTCEN
NAVPLANTREPO DALLAS
COMATKCARAIRWING 16
CO VA-25

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

FF12/CVW16:gy
3700
Ser: 14-69
30 JAN 1969

SECOND ENDORSEMENT on VA-25 Mishap Ser 1-69A occuring 9 Dec 1968, A-7 BUNO's 154500 and 154496, Pilots [redacted]

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

Subj: VA-25 Mishap Ser 1-69A occuring 9 Dec 1968, A-7 BUNO's 154500 and 154498, Pilots DISTAD and WILMOT

1. Forwarded concurring with the conclusions and recommendation of the Board and with the comments of the first endorser.

C. W. CATES

Copy to:
NAVAIRSYSCOMHQ (AIR-09E)
NAVPLANTREPO DALLAS
NAVAIRTESTCEN
CO, VA-25

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

ORIGINAL

20

230-69

VA25:03
3700
Ser 41
23 JAN 1969

FIRST ENDORSEMENT on VA-25 Mishap Serial 1-69A occurring 9 December 1968, A-7 BUNO's 154500 and 154498, Pilots (b) (6) [redacted]

From: Commanding Officer, Attack Squadron 25, FPO San Francisco 96601
To: Commander, Naval Safety Center
Via: (1) Commander Attack Carrier Air Wing ONE SIX
(2) Commanding Officer, NAS Miramar
(3) Commander Fleet Air Alameda
(4) Commander Naval Air Forces Pacific

Subj: VA-25 Mishap Serial 1-69A occurring 9 December 1968, A-7B BUNO's 154500 and 154498, Pilots (b) (6) [redacted]

1. Forwarded, concurring with the boards recommendations.

2. Ironically, the Squadron deployed to NAS Miramar after being unable to obtain suitable NLP weather at NAS Lemoore during the previous week. It would appear that a fog dispersal system at NAS Lemoore would be highly desirable and probably cost effective.

3. The board's conclusions regarding contributing cause factors assumes a perfect pilot capable of reacting instantaneously. It is felt that these pilots reacted normally and as well as could be expected under the circumstances. The major judgement error by all concerned was in underestimating the density of the fog. Since the pilots, and presumably the tower personnel, were familiar with fog such as exists around NAS Lemoore, they all felt a capability to taxi under reduced visibility. However, once in the fog bank, each pilot became concerned with his immediate needs of controlling his own aircraft. The pilots are to be commended for their efforts, however minimal, to bring the situation under control. The board's recommendation of installing a Transmissometer near the seaward side of NAS Miramar is considered especially worthwhile.

4. An additional factor, not considered by the board, was a policy of employing minimum braking on all landings to reduce wear on tires. Continual emphasis throughout RCVW training and since, has been placed on the use of aerodynamic braking and the dangers of hot brakes, blown tires and hydroplaning. However, it is unlikely that any Squadron A-7 pilot has had an opportunity to employ maximum braking or even had more than minimum training on the subject. This policy is a direct result of the shortage of tires in the supply system. This area is well documented and need not be reiterated here.

5. Due to operational committments and another mishap (2-69A) on 7 January 1969 the AAR Board was unable to complete this report within the prescribed time limits.

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

S. L. Smith
S. L. SMITH
19

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 I GENERAL

SECTION A. IDENTIFICATION

1. AIRCRAFT ACCIDENT BOARD APPOINTED BY: C.O. VA-25
2. SERIAL NO.: 1-69A
3. DTG (LOCAL) OF MISHAP: 092224U DEC
4. MODEL AIRCRAFT: A-7B
5. BUREAU NUMBER: 154198
6. TO: Commander, Naval Aviation Safety Center
7. VIA: Commander, Attack Carrier Air Wing ONE SIX; C.O. NAS Miramar; Commander, Fleet Air Alameda; Commander Naval Air Forces Pacific
8.
9. LOCATION OF MISHAP: RWY 24R NAS Miramar
10. DAMAGE: C
11. TIME OF DAY: NIGHT
12. TIME IN FLIGHT: 0.6
13. FLIGHT CODE: 3A3
14. CLEARED FROM: NAS Miramar TO: NAS Miramar
15. TYPE CLEARANCE: Local VFR
16. AIRSPEED: LNDG ROLLOUT
17. A/C WEIGHT: 23,600
18. BRIEF DESCRIPTION OF MISHAP: Collision with A7 on landing rollout in fog
19. ELEVATION AT TIME OF MISHAP: 477 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): A-7B 154500, VA-25, C Damage

SECTION B. CONTRIBUTING FACTORS

✓	FACTOR	✓	FACTOR	✓	FACTOR
X	1. PILOT ERROR IN TECHNIQUE/JUDGMENT		9. SERVICING PERSONNEL	X	17. WEATHER
	2. PILOT DEVIATION FROM NATOPS PROCEDURES		10. LANDING SIGNAL OFFICER		18. DESIGN AIRCRAFT
X	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 (IGS, OGA, ILS, MIRROR)		22. MATERIAL FAILURE/MALFUNCTION
	7. MAINTENANCE SUPERVISORY PERSONNEL		15. FACILITIES-CATAPULT, ARRESTING GEAR (Ship or field)		23. UNDETERMINED
X	8. SUPERVISORY OTHER (Specify) Operational Necessity	X	16. FACILITIES OTHER (Specify) Control Tower Personnel		24. OTHER (Specify)

1. NAME (Last, first, & middle initial)	2. GRADE	3. SERIAL NO.	4. [illegible]	5. [illegible]	6. [illegible]	7. [illegible]	8. UNIT	9. DIVISION	10. [illegible]
PILOT (at controls at time of mishap) [redacted] (b) (6)	LTJG	[redacted] (b) (6)		USNR	[redacted] (b) (6)	1	PILOT	At Controls	G
CO-PILOT (identify & submit separate page 1) NONE									

SECTION C. PERSONNEL DATA — PILOT EXPERIENCE IN HOURS

ITEM			ITEM		
11. ALL MODELS		460	17. CV LANDINGS DAY/NIGHT	ALL	18 / 6
				IN MODEL	10 / 6
12. ALL MODELS IN LAST 12 MONTHS		309	18. FCLP LANDINGS LAST 6 MONTHS DAY/NIGHT	ALL	56 / 108
				IN MODEL	56 / 108
13. ALL MODELS IN LAST 3 MONTHS		113	19. INSTRUMENT HOURS LAST 3 MONTHS ACTUAL/SIMULATED	ALL	3 / 0
				IN MODEL	3 / 0
14. ALL SERIES THIS MODEL	A/C	147	20. NIGHT HOURS LAST 3 MONTHS	ALL	33 /
	OFT/CPT	6 / 2		IN MODEL	33 /
15. ALL SERIES THIS MODEL LAST 12 MONTHS	A/C	147	21. TOTAL HOURS IN JETS (if jet mishap) HELOS (if helo mishap)		433
	OFT/CPT	6 / 2			
16. ALL SERIES THIS MODEL LAST 3 MONTHS	A/C	112	22. LAST PRIOR FLIGHT ALL SERIES THIS MODEL	DATE	27 NOV 68
	OFT/CPT	2 / 0		DURATION	1.4
23. DATE/GRADE LAST NATOPS STANDARDIZATION CHECK			24. TYPE INSTRUMENT CARD		STANDARD

OTHER PERSONNEL

25. NAME (Last, first, & middle initial)	26. DATE	27. GRADE	28. DIVISION OF SERVICE	29. FILE SERVICE NO.	30. UNIT	31. [illegible]	32. [illegible]	33. POSITION
[redacted] (b) (6)	DEC 67	LTJG	USNR	[redacted] (b) (6)	VA-25	G	PILOT	At Controls

154504

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
4 OCT 68	111.4	0	NA	NA	NA	UKN	UKN	UKN

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
(1)										
(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/IMPEUR
(1)								
(2)								
(3)								
(4)								

D. INCIDENTS & GROUND ACCIDENTS

1. PARTS REPAIRED		3. DIRECT MAN-HOURS INVOLVED	2. PARTS REPLACED	
PART NUMBER	NOMENCLATURE		PART NUMBER	NOMENCLATURE

E. ENGINE FAILURES

JET ENGINE FLAMEOUT (Include intentional secuing 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. PAR. EQT	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/BMEP	23. FUEL FLOW PRESSURE	24. OIL PRESSURE

INTENTIONAL SECURE	25. ENGINE SYMPTOMS	26. CAUSE OF SYMPTOMS

F. OTHER REPORT

IDENTIFY OTHER REPORTS CONCERNING THIS MISHAP

1. AMPLIFYING SERIAL NUMBER NONE
2. DIR. MESSAGE REQUEST DATE-TIME-GROUP NONE
3. OTHER Prelim/Supp msg VA-25 Det Miramar 101255Z DEC 68
4. NAMF Alameda msg 170050Z DEC 68

OPNAV REPORT 3750-1

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

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

G. SHIPS DATA

1. EQUIPMENT INVOLVED ☐ CATAPULT ☐ ARRESTING GEAR	2. PRESSURE SETTING	3. WIND OVER DECK	4. RELATIVE WIND	5. APPROACH/END SPEED
6. MARK NUMBER	7. MODEL NUMBER	8. LOCATION OF SHIP	9. LAUNCHING BRIDLE AND BRIDLE ARRESTER	

10. CATAPULT/ARRESTING GEAR BULLETINS OR NOMOGRAMS USED

11. This portion shall be completed whenever (1) an aircraft accident involves arresting gear barrier and/or barricade 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	12. DECK RUNOUT (FEET)	13. RAM TRAVEL (INCHES)	14. CONTROL VALVE SETTINGS: CONSTANT PRESSURE DOME (P.S.I.)	CONSTANT PRESSURE 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 pilot)

1. DATE DEPLOYED CONUS	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	5. DEW POINT	6. ALTIMETER SETTING
HI CIR	2	LIGHT AND VARIABLE	RUNWAY 48°F OUTSIDE AIR 48	40°F	29.66

7. OTHER WEATHER CONDITIONS (winds aloft, icing level, sea state, density altitude as appropriate)
Dense fog covered last 5-6,000 ft of Runway 24

PART III ADDITIONAL INFORMATION

PART	SECTION	ITEM	1. REMARKS

2. COPY DISTRIBUTION
2CC NAVAVNSAFECN DIRECT (AAR)
ICC NAVAIRSYSCOM HQ (AIR-09E)
ICC NAVPLANTREPO DALLAS
ICC NAVAIRTESTCEN

COST DAMAGE TO: 3. GOVERNMENT PROPERTY NONE 4. PRIVATE PROPERTY NONE

5. DATE SUBMITTED TO CO 15 JAN 1969

PART IV SIGNATURES OF THE BOARD

(b) (6) [redacted] t. Off. UNIT BILLET

(b) (6) [redacted] Asst. OPS Off. LT USN UNIT BILLET

(b) (6) [redacted] LCDR (MC) USNR

(b) (6) [redacted] VA-25 ASO LT USN 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-05F

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: C.O. VA-25
2. SERIAL NO.: 1-69A
3. DTG (LOCAL) OF MISHAP: 092224U DEC
4. MODEL AIRCRAFT: A-7B
5. BUREAU NUMBER: 154500
6. TO: Commander, Naval Aviation Safety Center
7. VIA: Commander, Attack Carrier Air Wing ONE SIX; C. O. NAS MIRAMAR; Commander, Fleet Air Alameda; Commander Naval Air Forces, Pacific
8.
9. LOCATION OF MISHAP: RNWY 24R NAS MIRAMAR
10. DAMAGE: C
11. TIME OF DAY: NIGHT
12. TIME IN FLIGHT: 0.2
13. FLIGHT CODE: 3A3
14. CLEARED FROM: NAS MIRAMAR TO: NAS MIRAMAR
15. TYPE CLEARANCE: LOCAL VFR
16. AIRSPACE: LNDG ROLLOUT
17. A/C WEIGHT: 24,500
18. BRIEF DESCRIPTION OF MISHAP: Collision with A7 on landing rollout in fog
19. ELEVATION AT TIME OF MISHAP: S.L. 477 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): A-7B 154498, VA-25, C Damage

SECTION B. CONTRIBUTING FACTORS

	FACTOR		FACTOR		FACTOR
	1. PILOT ERROR in TECHNIQUE/JUDGMENT		9. SERVICING PERSONNEL	X	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 (GCA, CCA, ILS, MOMPOR)		22. MATERIAL FAILURE/MALFUNCTION
	7. MAINTENANCE SUPERVISORY PERSONNEL		15. FACILITIES-CAT/PULT, ARRESTING GEAR (Ship or field)		23. UNDETERMINED
X	8. SUPERVISORY OTHER (Specify): Operational Necessity	X	16. FACILITIES OTHER (Specify): Control Tower Personnel		24. OTHER (Specify)

1. PILOT (Last, first, & middle initial) (b) (6) [redacted]	2. RANK	3. [redacted]	4. [redacted]	5. [redacted]	6. [redacted]	7. [redacted]	8. [redacted]	9. [redacted]	10. [redacted]
	LTJG	(b) (6) [redacted]		USNR	(b) (6) [redacted]	1		PILOT	At Controls G
CO-PILOT (Identify & submit separate page 1): NONE									

SECTION C. PERSONNEL DATA

PILOT EXPERIENCE IN HOURS

ITEM			ITEM		
11. ALL MODELS		475 / 574	17. CV LANDINGS DAY/NIGHT	ALL	29/6
				IN MODEL	17/6
12. ALL MODELS IN LAST 12 MONTHS		216	18. FCLP LANDINGS LAST 6 MONTHS DAY/NIGHT	ALL	18/
				IN MODEL	55/129
13. ALL MODELS IN LAST 3 MONTHS		129	19. INSTRUMENT HOURS LAST 3 MONTHS ACTUAL/SIMULATED	ALL	4/6
				IN MODEL	4/6
14. ALL SERIES THIS MODEL	A/C	155	20. NIGHT HOURS LAST 3 MONTHS	ALL	39/
	OFT/CPT	12/2		IN MODEL	39/
15. ALL SERIES THIS MODEL LAST 12 MONTHS	A/C	155	21. TOTAL HOURS IN JETS (if jet mishap) HELOS (if helo mishap)		325
	OFT/CPT	12/2			
16. ALL SERIES THIS MODEL LAST 3 MONTHS	A/C	120	22. LAST PRIOR FLIGHT ALL SERIES THIS MODEL	DATE	26 NOV 68
	OFT/CPT	2/		DURATION	2.2
23. DATE/GRADE LAST NATOPS STANDARDIZATION CHECK: 28 October 68/QUAL			24. TYPE INSTRUMENT CARD		STAN

OTHER PERS.

25. NAME (Last, first, & middle initial)	26. DTG	27. GRADE	28. DATE OF BIRTH	29. DATE SERVICE EN	30. UNIT	31. [redacted]	32. [redacted]	33. POSITION
(b) (6) [redacted]	MAR 68	LTJG	USNR	(b) (6) [redacted]	VA-25	G	PILOT	At Controls

FRONT

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

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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
11 OCT 68	94.4	0	NA	NA	NA	CAL	UKN	UKN

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
(1)										
(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. PUR/AMPEUR
(1)	NA							
(2)								
(3)								
(4)								

D. INCIDENTS & GROUND ACCIDENTS

1. PARTS REPAIRED		3. DIRECT MANHOURS INVOLVED	2. PARTS REPLACED	
PART NUMBER	NOMENCLATURE		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/BMEP	23. FUEL FLOW PRESSURE	24. OIL PRESSURE
INTENTIONAL SECURE	25. ENGINE SYMPTOMS		26. CAUSE OF SYMPTOMS				

F. OTHER REPORT

IDENTIFY OTHER REPORTS CONCERNING THIS MISHAP

1. AMPFUR SERIAL NUMBER NA
2. DIR MESSAGE REQUEST DATE-TIME-GROUP NA
3. OTHER Prelim/Supp msg VA-25 Det Miramar 101255Z DEC 68
4. NARF Alameda msg 170050Z DEC 68

Info. NASC on DIR request. See para. 66 OPNAVINST 3750.6E

OP-05F

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G. SHIPS DATA

1. EQUIPMENT INVOLVED ☐ CATAPULT ☐ ARRESTING GEAR
2. PRESSURE SETTING
3. WIND OVER DECK
4. RELATIVE WIND
5. APPROACH/END SPEED
6. HULL NUMBER
7. MODEL NUMBER
8. LOCATION OF SHIP
9. LAUNCHING BRIDLE AND BRIDLE ARRESTER
10. CATAPULT/ARRESTING GEAR BALLISTING OR NONBOSHVIC USED
11. This portion shall be completed whenever (1) an aircraft accident involves arresting gear barrier net/or barricade equipment, or (2) an aircraft accident involves malfunctioning of arresting gear, barrier net/or barricade equipment. Incidents or routine damage to cables, sheaves and other accessible equipment need not be reported herein.

ENGAGED	12. DECK RUNOUT (FEET)	13. RAM TRAVEL (INCHES)	14. CONTROL VALVE SETTINGS: CONSTANT PRESSURE DOME (P.S.I.)	RATIO	CONSTANT RUNOUT (OR LBS.)	15. ACCUMULATOR PRESSURE (PSI)	16. COMMENTS (for cable failures specify no. fouling and nozzle in service)
DECK PENDANT							
DECK PENDANT							
BARRIER/ BARRICADE							

H. DEPLOYMENT

FOR ACCIDENTS ABOARD CARRIERS (complete on pilot)

1. DATE DEPLOYED CONUS
2. NO. DAYS OPERATING PERIOD
3. DAY HOURS/LANDINGS SINCE DEPLOYMENT
4. DAY HOURS/LANDING LAST 30 DAYS
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: HI CIR
2. VISIBILITY: 2
3. RELATIVE WIND DIRECTION AND VELOCITY: LIGHT AND VARIABLE
4. TEMPERATURE: 18°F; DEW POINT: 19
5. DEW POINT: 10°F
6. ALTIMETER SETTING: 29.66
7. OTHER WEATHER CONDITIONS (include sky, icing, fog, sea state, density altitude, as appropriate)

Dense fog covered last 5-6,000 ft of Runway 24

PART III ADDITIONAL INFORMATION

PART	SECTION	ITEM	1. REMARKS

2. COPY DISTRIBUTION

2CC NAVAVNSAFECH DIRECT (AAR)

CC NAVAIRSYSCOM HQ (AIR-09E)

CC NAVPLANTREPO DALLAS

CC NAVAIRTESTCEN

COST DAMAGE TO: 3. GOVERNMENT PROPERTY: NONE; 4. PRIVATE PROPERTY: NONE

5. DATE SUBMITTED TO CO: 15 JAN 1969

PART IV SIGNATURES OF THE BOARD

(b) (6) [redacted] t. OPS Off.

LT USN — UNIT BILLET

(b) (6) [redacted] VA-25 ASO

LCDR USNR — LT USN — 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.

09-007

PART V

THE ACCIDENT

Attack Squadron Two Five had transferred pilots and aircraft to NAS Miramar on Monday, 9 December 1968 in preparation for a carrier refresher and weapons training exercise aboard the USS TICONDEROGA with Attack Carrier Air Wing SIXTEEN. All pilots were scheduled to complete one period of Field Carrier Landing Practice (FCLP) that evening. Local ground fog prevented commencement of flight operations until just prior to 2200 local when the visibility increased to four miles. Enclosure (1). One aircraft was launched into the landing pattern to check the tower-to-aircraft visibility, which proved satisfactory. (FCLP weather minimums are 700 ft ceiling and 2 miles visibility, or special VFR). Having been properly briefed, five pilots manned their aircraft and entered the FCLP pattern on runway 24L under the control of the CH-46 LSO on the NAS Miramar FCLP frequency monitored by the tower. As the pattern continued the pilots became aware of a fog bank forming on the western perimeter of the field. Shortly thereafter, CDR (b) (6) reported this condition as he was turning downwind. Enclosure (2). At 2210 local the tower concluded that the fog bank had formed to the extent requiring termination of flight operations and, following a discussion with the LSO, all aircraft were told to make final landings. The tower and LSO agreed that each aircraft would switch to primary tower frequency as they climbed during their downwind turn from their last FCLP landing. Enclosure (3). LTJG (b) landed first and encountered fog during rollout but successfully turned off at the 10,000 ft marker while LTJG (b) (6) was landing. During the time LTJG (b) was on his approach CDR (b) (6) was required to give way to a C-54 transport on a GCA approach. CDR (b) (6) turned downwind behind LTJG (b) (6) in AH 513 (BUNO 154400), and LTJG (b) (6) in AH 512 (BUNO 154498) took interval behind CDR (b) (6). LTJG (b) (6) landed on speed just beyond the mirror and began encountering fog at approximately 5-6,000 ft-to-go. He had landed near centerline but soon found that only the lights at the edge of the runway were visible when he was immediately adjacent to them. Enclosure (4). LTJG (b) (6) then made a transmission informing the tower that he was not clear of the runway and was unsure of his position. During this transmission CDR (b) (6) was beginning his landing rollout on the left side and commenced hard braking. He transmitted instructions for LTJG (b) (6) landing behind him to utilize the center of the runway as he was on the left. LTJG (b) (6) was landing at this time on centerline. He utilized aerodynamic braking until the nose fell through at approximately 100 KIAS. Shortly thereafter light to moderate braking was applied as he entered the fog. As CDR (b) (6) was passing the 4,000 ft marker at a slow speed LTJG (b) (6) passed him on the right at an estimated speed of 60-80 KIAS. LTJG (b) (6) had seen the lights from CDR (b) (6) aircraft only an instant before he overtook the aircraft. LTJG (b) (6) then applied maximum braking while attempting to steer to the left side of the runway. Skid marks indicate that LTJG (b) (6) wheels were locked or at near maximum braking friction for approximately 120 ft prior to impact with the left rear quarter of LTJG (b) (6) aircraft, AH 513. Enclosure (5) and (6). At the time of impact LTJG (b) (6) was attempting to locate the right side of the runway and was approximately 6 ft to the right of the centerline, while LTJG (b) (6) right wheel was on the centerline.

The relative velocity at impact was approximately 40 KIAS. LTJG (b) (6) saw the lights of AH 513 only a second before impact and could do nothing to avoid the collision at that point. The right wing of AH 512 (BUNO 154498)

contacted the tail section of AH 513 (PUNO 154500) pushing 513 into an arcing turn to the right. AH 513 stopped with the nose wheel just off the right side of the runway heading 340 degrees magnetic. The right side of the fuselage of AH 512 contacted the left wing of 513 causing a rupture in one of the fuel cells of 512. LTJG (b) (6) aircraft slid broadside for 130 ft coming to rest on a heading of 118 degrees magnetic. Miraculously there was no fire. As AH 513 was coming to rest at the edge of the runway LTJG (b) (6) informed the tower that there had been a collision and that he was shutting down. Due to the damage sustained to the throttle linkage of his aircraft the engine could not be secured until the fuel master lever was secured. Both pilots egressed manually from their cockpits, located each other in the thick fog, and assessed the damage to their aircraft. Neither pilot was injured.

The tower personnel closed the field following the final landing of the remaining A-7 which landed on runway 24L. This pilot turned off at the 6,000 ft marker but was unable to taxi further due to the thickness of the fog and finally secured his engine as instructed by the tower. CDR (b) (6) waited until the crash crew led him through the fog to a clear area and then he returned to the line. The sight of the collision was not located for approximately 15 minutes. Enclosure (7). The squadron safety officer arrived at the scene approximately 20 minutes later and the majority of the fog bank was still located on the western half of the runway. At times the visibility was no more than 20 ft while at other times the fog would momentarilylift providing at least 1,000 ft visibility. The weather observations at this time can be found in Enclosure (8). The aircraft were removed from the runway within two hours of the accident.

PART VI

DAMAGE TO AIRCRAFT

Impact occured with the fuselages parallel to each other at an estimated speed of 40 KIAS. Enclosure (9) and (10). The following is a description of the damage starting with the aircraft to the rear that caused the collision, AH 512/BUNO 154498.

As a result of the collision BUNO 154498 sustained fuselage damage from fuselage station [illegible] (f.s. 210) water line 78 (wl 78) to f.s. 360 w.l. 128. The damage commenced at the right hand intake duct fairing which was ripped open and continued along the right side of the fuselage inflicting skin damage and several skin punctures. Enclosure (11) The depth of fuselage penetration was from surface scratch to 8-12". At f.s. 308/w.l. 100 the fuselage was deeply penetrated destroying the right hand gun bay vent tubes, air conditioning control tubes, electrical harnesses and connectors, an ammunition chute and limited rib structures. Damage to the fuselage proper terminated when the force of impact jammed the emergency flap accumulator into the right hand upper outboard corner of the right hand forward fuselage fuel tank.

The starboard wing sustained major damage to the outer panel leading edge which also resulted in the destruction of the leading edge flap, the #7 pylon, an installed MAU 9 rack and a TER and substructers internally to the front beam. Enclosure (12).

The force applied to the right outer panel resulted in a torquing motion which was transmitted to the right hand trailing edge wing/ fuselage junctures which caused the trailing edge flap to puncture the fuselage skin about three inches indicating excessive center wing section torquing within the fuselage structure. This internal damage is further documented by upper fuselage skin wrinkles. Overall extent of wing/fuselage damage can only be determined by entire wing removal. The engine received foreign object damage from material injested from BUNO 154500.

The damage sustained by BUNO 154500 is as follows:

Impact damage was sustained from fs 712/w.l. 130 and terminated at fs 526. This damage is considered severe. The entire vertical tail was severed at the fuselage attach fittings with the only remaining contact point being the rudder cables. The port horizontal tail and supporting structures were completely severed from the the fuselage resulting in extensive port side aft damage in conjunction with severe damage to all included sub-assemblies. Enclosure(13).

Engine damage is considered severe in that the entire tail cone was crushed and partially severed. The rear engine mount was broken resulting in the entire engine being forced forward causing an approximate 4-6 inches of intake duct buckling. The engine throttle control rod bell crank assembly was broken.

The left hand outer wing panel was severed at about 16 inches from the outboard edge which resulted in 12 inches of the port aileron being torn and twisted. The left hand trailing edge flap was extensively damaged due to being struck by the vertical fin when that structure was severed.

There is suspect wing torquing to an unknown extent due to damage to fuselage point at the right hand inboard trailing edge flap down position.

Both aircraft were transferred to NAS North Island following post accident investigation and P and E analysis for further shipment to NARF Alameda. A more complete analysis of the damage will be determined at Alameda as will the feasibility for repair.

Special Handling required in accordance with OPNAVINST 3750.6 Series.

PART VII

THE INVESTIGATION AND ANALYSIS

A. Personnel Factors

1. Pilot Factors

LTJG (b) (6) [redacted] was disignated a Naval Aviator in March 1968. He accumulated 460 total hours including 433 hours in Jet Aircraft and 147 hours in A-7A and B aircraft. He reported to VA-25 in November 1968 following training at VA-122 where he accumulated 76 hours in the A-7 and achieved a Flight Grade of 2.87. Enclosure (4) and page 1 of this report contain a resume of his flight experience. His overall training command flight grade was 52.

LTJG (b) (6) [redacted] is considered to be an above average pilot who generally exhibits good headwork and airmanship. He had recently returned from a highly successful Air Ring Weapons Deployment at NAAS Fallon, Nevada during which he accumulated 39 hours in 14 flying days. He last flew on 27 November and his previous night flight was on 25 November. Three hours prior to the accident he reported to the hangar for briefing. No abnormalities existed during Field Carrier Landing Practice (FCLP) to runway 24L at NAS Airmar until fog began to obscure the far end of runway 24. As stated in Part IV LTJG (b) (6) [redacted] switched to tower frequency following his last FCLP landing on runway 24L and turned downwind. He observed AH 502 entering downwind ahead and to his left. His interval was somewhat closer than normal for an FCLP pattern but not so close as to call for any immediate action. While LTJG (b) (6) [redacted] was on final approach LTJG (b) (6) [redacted] was approximately 6,000 ft down the runway and reporting the lack of visibility. CDR (b) (6) [redacted] had just landed and was taking the left side of the runway. He commenced hard braking following aerodynamic braking at approximately 7,500 ft-to-go. During LTJG (b) (6) [redacted] landing and initial rollout CDR (b) (6) [redacted] transmitted his intention to remain well left while recommending LTJG (b) (6) [redacted] take the right side. LTJG (b) (6) [redacted] had reported his inability to determine his position and was moving very slowly near the centerline of the runway. The tower had instructed all aircraft to continue rolling to the end of the runway.

The board believes that neither the tower personnel nor LTJG (b) (6) [redacted] were fully aware of how limited the visibility was beyond the 4 to 5,000 ft-to-go marker. All aircraft landed near the mirror touch down point. The first two aircraft landed at optimum approach speed of approximately 130 KIAS with a gross weight of 23,000 lb, which includes approximately 4,000 lb of fuel. LTJG (b) (6) [redacted] landed at approximately 140 KIAS. This increased speed was due to the fact that the trailing edge flaps were extended only 28 degrees vice their full travel of 40 degrees. This fact was discovered on post accident investigation by flap position comparison and the cockpit flap indicator. The A-7B trailing edge flaps can be positioned at any point between full up and 40 degrees by applying fore or aft pressure on the flap handle when the handle is in the down position. The leading edge flaps are not variable and are either fully up or fully down depending upon the selection. Prior to taxi LTJG (b) (6) [redacted] did not knowingly apply forward pressure on the flap handle after the handle is in the down detent. Full nose wheel steering becomes operative between 20 and 40 degrees of left hand trailing edge flap movement. Since full nose steering was available to LTJG (b) (6) [redacted] it is certain that the trailing edge flaps were at least between 20 and 40 degrees throughout the flight.

LTJG [redacted] (b) (6) did not knowingly apply forward pressure on the flap handle at any time prior, during or after the flight and, flight characteristics and cockpit indications appeared normal from take off to final landing. The flap system was inspected for proper operation and no fault could be found. The flaps are not designed to blow up due to airloads. The board could not positively determine why the trailing edge flaps were not fully down. The most probable reason is thought to be inadvertent activation by the pilot although the pilot does not recall initiating this rather positive action.

Even though LTJG [redacted] (b) (6) landing speed was approximately 10 KIAS faster than the preceding two aircraft, it was still within his and the aircraft brake system capabilities to stop prior to impact with LTJG [redacted] (b) (6) and possibly by the point where he passed the second aircraft. As stated in Enclosure (4) LTJG [redacted] (b) (6) was unsure of his position on the runway and had transmitted this fact on tower frequency prior to LTJG [redacted] (b) (6) landing. Likewise, CDR [redacted] (b) (6) transmission indicated that he was near the edge of the fog, Enclosure (2). Knowing these unrevealed facts LTJG [redacted] (b) (6) should have realized that if he entered the fog bank he would be unable to see the two aircraft ahead and would therefore be risking a collision. He had two alternatives: Add power and go around or stop prior to entering the fog. The first choice would have been the wiser but apparently was not considered. The most probable reason for non-consideration was the desire to get the aircraft on deck before the fog bank moved closer to the approach-end of the runway. This desire would be evident to many pilots, especially in light of the following facts: The requirement to fly the Squadron's aircraft aboard the USS [illegible] the following day; and that the nearest suitable (having A-7 maintenance personnel) divert field was NAS [illegible] or NAS [illegible]. The pilot stated that his primary reason for landing at NAS [illegible] was that it still appeared to be the best course of action.

LTJG [redacted] (b) (6) second alternative was to utilize maximum braking in order to stop as soon as possible. With his gross weight, landing speed and touch-down point (Approx 700 ft from the approach end), LTJG [redacted] (b) (6) would have been able to commence moderate to heavy braking almost immediately after touch-down while holding full nose up UNT. If he had utilized this technique he could have been able to stop in approximately 4,5[illegible] ft, or by the 6,500ft-to-go marker, thereby preventing a collision with either aircraft. Instead, he initially utilized braking techniques normally used for full-runway-roll-out. He experienced jet wash on final landing and hesitated in commencing aerodynamic braking. Following zero braking he began to apply light to moderate braking at approximately 90 KIAS with 8,000 ft-to-go. Had he applied maximum braking here he would have prevented the collision.

[illegible] He had lost sight of the aircraft immediately ahead following his landing and as he passed CDR [redacted] (b) (6) at the 5,000 ft-to-go marker he applied maximum braking. The collision occurred 1,400 ft later at an estimated closure speed of 40 KIAS. In discussing the type and density of the fog encountered, LTJG [redacted] (b) (6) stated that he expected to see less-dense fog with at least 500 to 1000 ft of visibility, or similar to that which he had encountered at NAS Lemoore. He stated he was surprised to see such thick fog. LTJG [redacted] (b) (6) actions following the collision were both correct and timely.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Two factors contributed to LTJG (b) (6) [redacted] lack of response in attempting to prevent the collision. These are: The lack of adequate warning from pilots who had landed previously as to the danger of entering the fog and, the transmission by tower personnel instructing all pilots to continue roll-out to the end. Had any of the pilots who were already in the fog taken more positive action by telling LTJG (b) (6) [redacted] to stop as soon as possible, or go around, the accident may have been prevented. Similarly, had earlier action been taken by pilots or tower personnel concerning the fog bank to the west of the field the accident could have been prevented. Nevertheless, the board will assign pilot factor on the part of LTJG (b) (6) [redacted] as primary cause of this accident in that he failed to realize the necessity for making a landing rollout in minimum distance, or waving off.

LTJG (b) (6) [redacted] was designated a Naval Aviator in December 1967 and has accumulated 475 total hours including 325 hours in jets and 155 hours in the A-7. His Training Command flight grades averaged 52, and his overall flight grade at VA-122, the A-7 RNG. were 3.01. He is considered to be an above average aviator. LTJG (b) (6) [redacted] last day flight was on 26 November and his last night flight was on 25 November. He was considered adequately prepared for the flight and all was normal until he encountered the fog. (LTJG (b) [redacted] had landed while LTJG (b) (6) [redacted] was between the 180 and the 90, and had turned off the runway at the 2,000 ft-to-go marker following a 270 degree turn after passing the turnoff.) As stated in Enclosure (4), LTJG (b) (6) [redacted] was unsure of his position on the runway and, without visual reference, could only creep along in hopes of seeing a light or marker. Had LTJG (b) (6) [redacted] more emphatically stated his possible position and advised the other aircraft to stop as soon as possible on alternate sides of the runway, or had he been on the far right side of the runway, the collision would not have occurred. His actions following the collision exhibited good headwork in that he was the only one who reported the collision prior to securing the engine.

CDR (b) (6) [redacted] was designated a Naval Aviator in October 1954 and has accumulated 3077 total hours including 255 hours in the A-7. His decision to utilize maximum braking and take the extreme left side of the runway is generally sound, although the use of maximum braking with an aircraft landing behind may have been disastrous had LTJG (b) (6) [redacted] not followed CDR (b) (6) [redacted] informative transmission to take the center or right side of the runway to avoid his far left position. It is possible for three A-7 aircraft to be abreast on a 200 foot wide runway with 25 ft to spare and it was CDR (b) (6) [redacted] intention to achieve this separation. Both pilots involved in the collision were aware of this clearance and were attempting to obtain proper lateral separation on the runway at the time of the collision. Of course, once in the fog, determination of position was apparently impossible due to the fog density. Once again, an earlier decision by CDR (b) (6) [redacted] or anyone involved to find all aircraft, or to recommend maximum braking may very possibly have prevented the accident or minimized the damage.

LT (b) (6) [redacted] was the LSO and is considered fully qualified in that respect. He is assigned as the Carrier Air Wing SEVENTEEN LSO. LT (b) (6) [redacted] was fully cognizant of the poor weather prior to and during the initial portion of the FCLP pattern and was made aware of the moving fog bank by the tower and pilots. From his position at the mirror on runway 24L he could not accurately determine its extent, distance, or thickness. He was in control of the pattern until each aircraft switched to tower frequency while turning downwind for their final landings. The board considers that LT (b) (6) [redacted] actions were in no way contributory to the accident.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

2. Maintenance personnel were not a factor in the accident.

3. Supervisory Factors

In discussing supervisory factors, the board will discuss certain facts which very possibly created a prevailing and compelling desire upon each squadron pilot to complete a certain number of FCLP landings that night prior to commencing a carrier refresher and weapon deployment with Air Wing SIXTEEN.

During the month of November, the Air Wing participated in a 2½ week weapons training deployment at NAAS Fallon, Nevada. VA-25 deployed with a full complement of 20 pilots, however, approximately ten of these were not fully completed at (VA-122) the A-7 replacement squadron. On the date of the accident, all pilots had completed the VA-122 syllabus and were attached permanently to VA-25. During the month of October, while attached to VA-122, all pilots had completed between 100 and 150 field carrier landings in preparation for NAG Carquals. In October and November each pilot completed at least 10 day and 6 night carrier landings to satisfy NAG requirements. While at Fallon the squadron flew over 900 hours and few pilots logged less than 50 hours for the month. Field carrier landing practice was conducted at NAAS Fallon when possible. VA-25 pilots averaged one FCLP period or approximately seven mirror approaches while there. Following the return from Fallon to NAS Lemoore minimal flying was completed due to heavy aircraft maintenance requirements and poor weather, (i.e. weather below FCLP minimums). The following is a summary of VA-25 flight activity between 27 November (return from Fallon), and the beginning of carrier operations on 10 December:

> The minimum and maximum number of flights any pilot flew was 3 and 0.
>
> Three pilots did not fly during the above period, their first flight being to or originating at the carrier. (The average number of flights was one.)
>
> The average, maximum and minimum number of FCLP landings during the above period was 3, 12 and 0. Nine pilots received no FCLP practice during this period. Three of these pilots are first tour types.

Because of persistent fog at Lemoore, the decision was made to fly to Miramar on Monday, 9 December in order to conduct FCLP that night as the weather had been good there during the previous nights. All pilots were scheduled to fly one FCLP period that night and, naturally, each pilot felt he could benefit from same.

In light of the above facts, the board feels that each VA-25 pilot felt that these FCLP landings were quite important. This contributed to the accident in that the atmosphere was one of compulsion to complete as much field carrier landing practice as possible. The board believes that the overall commitments placed upon VA-25 because of a compressed training cycle were a factor therefore the board will assign, as a contributing cause, operational necessity.

B. Material Failures or Malfunctions

There were no material failures of malfunctions. The brake system on each aircraft worked properly. As stated earlier, no malfunction in the flap system of BUNO 154498 could be discovered which would cause the flaps to be positioned at 28 degrees instead of 40 degrees.

C. Facilities

Facilities and personnel at NAS Miramar were a factor in this accident. The most directly involved individuals were the control tower operators. Their performance was generally excellent, especially following the accident. They reported the fog bank moving toward the field at 2210, 14 minutes prior to the accident. They informed the LSO (and pilots) of this fact and all aircraft switched to tower frequency for final landings. See enclosures (15) and (16). At approximately this time, a transport aircraft was executing a GCA approach which necessitated CDR [redacted] (b) (6) remaining at VFR pattern altitude in that IFR traffic is given priority at NAS Miramar. After being cleared to reenter the landing pattern, CDR [redacted] (b) entered downwind between LTJG's [redacted] (b) (6) and [redacted] (b) (6) A slightly closer interval between the three aircraft resulted in all aircraft rolling out at approximately 4,000 foot separation initially. This is normally a safe interval for day landings but appears somewhat close at night, especially in light of the reduced visibility. NAS Miramar has a waiver from the Chief of Naval Operations permitting reduced separation between aircraft landing and taking off. This waives the FAA requirement to have each aircraft clear of the runway before another lands or takes off. (FAA Terminal Air Traffic Control Handbook 7110.8). In order to prevent collisions and provide adequate separation on rollout, the tower will normally request that pilots continue their rollout to the end of the runway. While this may be effective in fair to good visibility, it would seem unwise when visibility is less than the minimum stopping distance for a particular type of aircraft. (Approximately 5,000 ft for the A-7). Blown tires, arresting gear engagements, collisions, etc may occur without the knowledge of the pilot landing behind. If he did not have sufficient visual or audio (pilot or tower) information concerning an obstruction ahead a collision would very possibly occur. (See Part IX).

No doubt the tower personnel were quite concerned over the fog and were anxious to recover all aircraft before the fog bank completely covered the field. (The fog shifted and lifted during the succeeding hours and had generally dissipated by 0100 local). The extent and primarily the thickness of the fog bank could not be determined by the tower personnel or the meteorological personnel/instruments. At the first indication of restricted visibility on the runway tower personnel should have insisted that each pilot positively report clear of the runway before another aircraft landed. Some indecision or confusion may have existed on the part of the tower personnel as several pilots, including LTJG's [redacted] (b) (6) and [redacted] (b) (6) were not cleared to land until wings-level on final. Some of this confusion may have been caused by switching frequencies from LSO to the tower, and switching from runway 24L to 24R. Because the tower personnel did not take positive action to prevent a collision, i.e. waveoffs until each aircraft cleared the runway, the board considers that control tower personnel contributed to the accident.

Investigation of the meteorlogical facilities at NAS Miramar revealed that the visibility measuring equipment (transmissometer) is located at the approach end of the primary runway, 24. This equipment was recording seven miles visibility at the time of the accident, see Enclosure (17). Had a transmissometer been operating at the opposite end of the field, the tower personnel could have more correctly and more quickly analyzed the visibility problems. The board considers that this lack of equipment and resulting loss of information from it contributed to the accident.

The crash crew performed extremely well under adverse operationg conditions (i.e. fog). Field support vehicles were also utilized in assisting pilots not involved in the collision to taxi clear of the fog bank. (Tower personnel) had instructed all pilots to secure aircraft engines if unable to visually taxi. Had this recommendation been followed, it would have resulted in three unlighted aircraft being shut down to await assistance in unknown positions on the field.)

D. NATOPS

LTJG (b) (6) failed to conduct a thorough landing cockpit check in that the trailing edge flaps were not fully extended on his final landing. No changes to NATOPS are necessary.

NOTE: See Enclosure (18) for the Medical Officers Report on LTJGs' (b) (6) and (b) (6).

SPECIAL HANDLING IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

PART VIII
CONCLUSIONS

1. The primary cause of this accident is the pilot, LTJG (b) (6) [redacted] in that he failed to recognize the danger of landing and braking normally when two aircraft were on the runway but not visible due to fog.

2. The following were contributing cause factors:

a. Facilities - Tower personnel allowed three aircraft to land in close proximity to each other with the knowledge that visibility was extremely limited over the last half of the runway.

b. Facilities - Runway-visual-range measuring equipment (transmissometer) was available on the approach end of the runway only, which resulted in inadequate and inaccurate visibility information for the opposite side of the field.

c. Supervisory - Pre-Deployment (WestPac) training requirements, maintenance workload/aircraft availability and poor weather resulted in minimum pilot flight time and pre-carrier landing practice. This directly influenced the decision to continue field carrier landing practice until the fog made the landing rollout unsafe.

PART IX

RECOMMENDATIONS

In desiring to prevent another accident of this type the board recommends the following:

1. Make wide dissemination of this accident in Approach Magazine, Crossfeed, Naval Aviation News, etc. which will instruct all pilots/commands concerning the cause factors of this accident. It is requested that the Naval Safety Center take this for action with VA-25 assisting as directed. note

2. Establish a minimum visibility criteria at which time, the FAA requirements of having only one aircraft at a time on the duty runway, be reestablished.

3. Install visibility measuring equipment on each end of the primary runway at all military fields.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

LIST OF ENCLOSURES

1. Weather Observation Chart
2. Statement of CDR (b) (6) pilot
3. Statement of LT (b) (6) LSO
4. Statement of LTJG (b) (6) pilot
5. Statement of LTJG [redacted] pilot
6. Diagram of accident scene
7. Statement of F. H. OLIVER, Crash Crew Captain
8. Weather Report
9. Photograph of damage to aircraft
10. Photograph of damage to aircraft
11. Photograph of damage to aircraft
12. Photograph of damage to aircraft
13. Photograph of damage to aircraft
14. Resume of pilot experience
15. Statment of AC1 (b) [redacted], Control Tower Section Leader
16. Statement of AC2 (b) (6) [redacted], Control Tower Operator
17. Statement of LCDR (b) (b) [redacted], Meteorological Officer
18. Medical Officers Report
19. VA-25 ltr ser 48 of 4 Mar 69
20. FIRE + RESCUE REPORT

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

OPNAV FORM 3140-6 (REV. 6-61)

NWSED

DEPARTMENT OF THE NAVY
SURFACE WEATHER OBSERVATIONS
(LAND STATIONS)

Station: Naval Air Station MIRAMAR, California 92145

Date: 09DEC1968

Type	Time (LST)	Sky and ceiling (hundreds of feet)	Visibility (statute miles) Surface	Tower	Weather and obstructions to vision	Sea level pressure (Mb)	Temp. (°F)	Dew pt. (°F)	Wind Direction (true)	Speed (knots)	Character and remarks	Altimeter setting (inches)	Remarks and supplemental coded data		
S	0030	-X/⊕	1/2	1/2	GF		44	42	10	02		011	R24VV4 F4	✓	SW
RS	0058	-X/⊕	1	1	GF	193	43	41	09	04		011	R24VV4 F1 80S 1001	✓	SW
S	0125	/-⊕	3	3	GF		42	39	09	02		011	R24VV4	✓	SW
R	0158	/-⊕	5		GF	193	42	39	09	01		011	R24VV6	✓	SW
R	0258	/-⊕	5		GF	190	41	36	10	04		010		✓	1007
R	0358	/-⊕	5		GF	194	38	33	31	04		011	500 1001 38	✓	1007
RS	0458	-X	0	0	GF	194	39	37	32	04		011	R24VV0 F5	✓	1007
S	0500	-X	1/2	1/2	GF		38	37	35	03		011	R24VV3 F3	✓	1007
RS	0530	150 ⊕	4	4	GF	202	40	35	00	00		014	BINOVC E GF BANK ← S W	✓	SP
R	0658	/-⊕	40			204	41	34	09	01			310 1007	✓	SP
R	0758	U⊕	40			209	47	34	00	00		016	GF S W-N	✓	SP
R	0858	U⊕	7			220	48	40	00	00		019	BINOVC E S	✓	SP
R	0958	/-⊕	7			219	54	36	00	00		019	115 1008 37	✓	SP
R	1058	/-⊕	7			216	58	34	30	05		018		✓	SP
R	1158	/-⊕	7			199	62	35	34	02		013		✓	SP
R	1258	/-⊕	7			192	67	34	27	03		011	725 1001	✓	SP
R	1358	/-⊕	7			187	68	36	27	03		010	ACFT MISHAP	✓	SP
R	1458	/-⊕	7			191	65	36	26	05		011	BINOVC SE	✓	SP
R	1558	-X U⊕	4		H	204	55	48	31	08		014	TWR VSBY 3 MI 310 1007 GB	✓	SP
S	1605	-X U⊕	2	2	H				32	08		013	HZ	✓	1007
R	1658	-X U⊕	2	2	H	204	54	49	31	04		014	H3	✓	1007
R	1758	-X U⊕	2	2	H	204	53	48	07	04		014	H4	✓	1007
S	1820	U⊕	4	4	H		51	46	08	05		015		✓	1007
R	1858	/-⊕	3	3	H	205	51	43	25	06		015	302 1001	✓	1007
S	1905	-X/-⊕	1	1	H		51	43	25	05		015	R24VV1 3/4 H5	✓	1007
L	1917	-X/-⊕	1	1	GF		50	46	28	03		016	R24VV1 3/4 F5 ACFT Mishap	✓	1007
S	1945	-X/-⊕	3/4	3/4	GF		50	46	03	02		016	R24VV2 F5	✓	1007
RS	1958	-X/-⊕	1	1	GF	209	50	47	06	03		016	R24VV2 F5	✓	1007
R	2058	-X U⊕	1	1	GF	209	49	45	06	04		016	R24VV6 F5	✓	1007
R	2158	/-⊕	4	4	GF	213	49	41	07	03		017	208 1001 68	✓	1007
S	2224	/-⊕	2	2	GF		48	40	27	04		017	R24VV 2 ACFT ACCIDENT	✓	1007
RS	2258	-X U⊕	1/4	1/4	GF	213	45	43	29	02		017	R24VV4 F5	✓	1007
RS	2358	-X U⊕	3/4	3/4	GF	204	45	43	31	04		014	R24VV4 F5	✓	1007

Following related aviation observation

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES
ENCLOSURE (1)

Statement of CDR (b) (6) [redacted] USN, VA-25 Executive Officer, concerning VA-25 MAR 1-69A occurring 9 DEC 1968, A7B BUNOS 154500 and 154498, pilots (b) (6) [redacted] and (b) (6) [redacted]

At approximately 2130 9 DEC 1968 I launched from 24R at NAS MIRAMAR into the FLP pattern. On the downwind turn I passed over Clairemont noting that, although fog had covered the western section, the area closest to MIRAMAR was clear of fog. On subsequent passes I noted the fog moving toward MIRAMAR, obscuring Clairemont by approximately 2150. Sometime around 2200 I made a radio transmission to the effect "Watch the fog, its at the end of the runway". I recall the tower calling Paddles, to the effect "Paddles, the fog is at the edge of the field". Soon thereafter, I was told by the LSO to final on 24R (FLP's were conducted on the left). I climbed to a high and wide "180", shifted frequency to tower primary, and called the 180 for a final. The tower directed me to continue, I asked why. They said a C-54 prop aircraft was at 3 miles, and directed me to take it around. I believe I should have been given priority to land. As I passed over the landing area of 24R the tower cleared me downwind. I turned to the 180, behind AH513. I did not see AH512, but I heard his 180 call when I was at the 90. I recall seeing the fog reaching the 4000 foot-to-go on 24R when I first turned downwind for final. AH513 appeared to land toward the right side of 24R, so I elected to land on the left half. As I was rolling out I heard AH513 call that he was in the fog and couldn't see anything. I immediately started hard braking, entered the fog at approximately 5000 foot- to-go, and called on the radio to the effect, "Aircraft coming down the runway, stay on centerline, I'm ahead in the fog, am pulling off to the left". As I slowed to a crawl at the 4000' taxiway from 24L across 24R, I was startled by an A7 passing me rapidly on the right, apparently on centerline. I estimate his speed between 60-80 knots. I thought "There's nothing I can say, there's no time, I hope the other plane (AH513) cleared to the right". He hadn't, at least far enough, because the next instant LTJG (b) (6) [redacted] transmitted "Tower, I've been hit from behind, I'm getting out of my airplane". I pulled off the runway onto the taxiway between the runways and was directed by the tower to hold my position. About 10 minutes passed, when out of the fog appeared two crash trucks. I directed them to go down the runway to the crash site. Visibility I estimate to have been 50 feet. I was eventually cleared to taxi back following a third crash truck, and broke out of the fog abeam VF-124 hanger.

I was designated a Naval Aviator on 13 OCT 1954 and have accumulated 3877 hours, including 255 hours in the A7A and B.

(b) (6) [redacted]

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Enclosure (2)

Statement of LT (b) [redacted] LSO concerning VA-25 AAR 1-69A occurring 9 DEC 1968, BUNOS 154500 and 154498, pilots (b) (6) [redacted]

On 9 January 1969 I was the controlling LSO for VA-25. FCLP that night was delayed due to fog. Finally at approximately 2100U the weather improved sufficiently enough to allow FCLP.

FCLP at Miramar is conducted on 24L. The aircraft while in the FCLP pattern are controlled by the LSO with the control tower monitoring the pattern. At approximately 2200U, the tower advised me that the weather was deteriorating and that the aircraft would have to be finaled. I requested that the aircraft remain on the discrete FCLP frequency but the tower said they would have to shift back to tower primary and land on 24R.

As a result of the frequency shift, I could not monitor the final landings on 24R. At the time of the final landings the fog bank had moved down the runway to the intersection of 24R and 28, preventing me from seeing any of the aircraft once they rolled past the intersection. The runway area up to this point from the touchdown area was relatively clear.

The first that I knew of the accident was when I called the tower for wheels from the LSO platform to the hangar to debrief the pilots.

I am a designated Naval Aviator with 2800 hours.

(b) (6) [redacted]

LT USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Enclosure (3)

Statement of LTJG (b) (6) [redacted] USNR concerning TA-4J [illegible], BUNOS 154[illegible] and 154498, Pilots (b) (6) [redacted] and [redacted]

I manned 513 at 2130, taxied to the end of 24R and called for takeoff. The tower told me to hold short and approximately 5 minutes later I was cleared for takeoff. I took off at 2230 climbed to 1100' MSL took interval and turned downwind. I noticed that there was some ground fog to the west of the field. I made a TGP touch and go, climbed out, took interval and turned downwind. At this time I noticed the fog was approaching the end of 24R. As I passed the 180 position all aircraft were told to final. The LSO requested permission for the aircraft ahead of me, who was in the groove for 24L, to make a TGP touch and go. Permission was granted. I called the tower at the 135 position for clearance to full stop on 24R. The tower failed to acknowledge and I turned my lights bright and flash [illegible] and continued the approach. LTJG (b) [redacted] meanwhile was rolling out on 24R and told the tower he wasn't clear of the duty. At the 90 the tower asked me my side number and I told them and I was cleared to land as I rolled in the groove. I noticed the fog was covering part of the runway and I didn't see any aircraft on it so I came in and landed.

I was high at the ramp and landed past the mirror on speed. I aerodynamic braked to 100 KTS. and saw the fog rapidly approaching. With 7000' remaining I started some firm braking and entered the fog. I had landed on center line and continued to roll out on center line.

The visibility was about 20' and I told the tower I couldn't see the runway lights or markers. Two aircraft were cleared to land behind me - 502, 512. 502 asked me what side I wanted. I said I was on center line but would take the right, he said he would take the left.

The tower had instructed all aircraft to roll to the end. I continued rolling very slowly ahead and easing to the right side of the runway. I wasn't aware of my actual position on the runway.

The tower was talking to the three aircraft on the runway in relation to their position to markers.

All of a sudden I felt this bump from behind and my plane swerved right. I realized I had been hit by one of the other planes from behind and I immediately transmitted such to the tower and tried to shut the engine down with the throttle. The engine kept running so I turned off the fuel master, unstrapped and fled.

The plane had stopped perpendicular to the runway with the nose wheel just off the edge.

I observed considerable damage to the tail section and left wing.

The fog was so thick I couldn't see the plane that hit me across the runway.

The crash crew was unable to locate the damaged aircraft for about 15 minutes due to the fog.

[illegible] SPECIAL [illegible] REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Enclosure (4)

I didn't experience any injury.

I was designated a Naval Aviator in December 1967 and have accumulated 475 total flight hours including 155 in the A7.

(b) (6)

[redacted]

Special Handling required in accordance with OPNAVINST 3750.6 Series

Statement of LTJG (b) (6) USNR concerning VA-25 AAR 69A occuring 9 December 1968 BUNOS 154500 and 154498, pilots (b) (6) [redacted]

I manned AH512 at approximately 2125 for an NLP period at Miramar. My takeoff time was 2148. I climbed into the pattern, had seven night NLP's followed by two wave offs due to high fast starts and on down wind from the last the LSO called all aircraft to switch to tower frequency to final due to fog coming in over the upwind end of the runway 24. LTJG (b) (6) in AH 502 was first to land and was still on the runway in the fog when LTJG (b) (6) in AH 513 was cleared to land. CDR (b) (6) turned to downwind above me and I took interval and flew an on speed, APC (Automatic Power Compensator) pass to a center line touch down at the mirror with a 23,500 A/C. I was cleared to land while in the groove. My roll out was on center line and after 3000' of roll I could no longer see CDR (b) (6) in 502. At this time he transmitted that he was going to take the left side and I started braking and got to the right side. I was at 5000' remaining when I went by 502 and I started back to the left because LTJG (b) (6) in 513 said he was on the right. I saw 513 for an instant and made impact; my right wing into his vertical stabilizer. My aircraft spun around 300 degrees, and I shut down as I came to rest. I exited the aircraft and gave it a quick look over. Next I headed back up the runway toward AH 513 to see if LTJG (b) (6) was alright. I walked by 513 but saw (b) (6) with his red flashlight walking over to me.

As I passed AH 502 the visibility was no greater than 40 feet and remained at 20 to 40 feet at the upwind end of the runway.

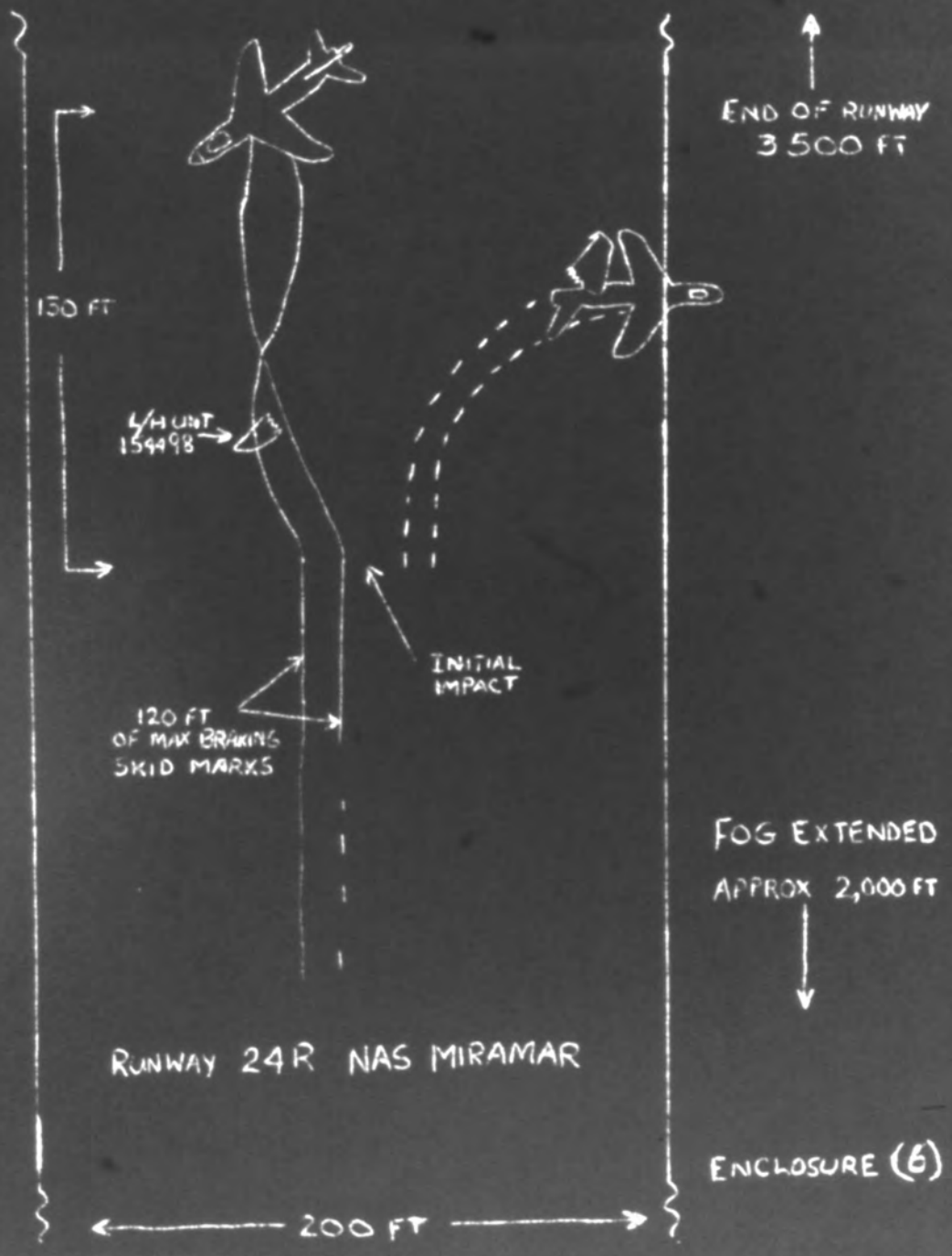
On my last wave off I could see that the fog had covered at least 3,000 feet of the upwind end and on the pass just prior I estimated that the fog obscured 1,000 feet of runway 24.

I was designated a Naval Aviator in March 1968 and have accumulated 460 total flight hours of which 147 have been in the A7

(b) (6) [redacted]

Special Handling required in accordance with OPNAVINST 3750.6 Series

Enclosure(5)



ENCLOSURE (6)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES.

Statement of Mr. F. M. OLIVER, Crash Fire Captain concerning VA-25 AAR 1-69A occurring 9 DEC 1968, A7B BUNOS 154500 and 154498, pilots (b) (6) [redacted]

At 2223 this date crash alarm rec'd. reporting aircraft collision on runway 24R at Q10. No delay was experienced in initial response, but, on reaching the 5000' marker, severe fog conditions were encountered. Visibility being practically zero, all vehicles were requested to use extreme caution and to locate and advise of the condition of 6 aircraft the control tower reported being in the area.

The alert runway crew, on standby at the 10,000' marker, reported via radio that aircraft 504 had cleared the runway at that point and was in no apparent difficulty. They were requested to remain with the aircraft. In addition to providing emergency lighting, they later escorted the aircraft to a position near the control tower.

Another crash co. located aircraft 502 between runways 24R & 24L at the 8000' mark. This crew escorted the aircraft across 24R and to the fuel pit area. Downlocks were installed and the aircraft taxied to VF-111 Line.

Two crash companies located aircraft 512 & 513 on runway 24R at approx. the 8500' mark. Both pilots were clear of their aircraft and apparently uninjured. Their safety and a no-fire condition was reported to control tower. A collision had occurred between the 2 aircraft; their condition and appearance indicating that 512 struck 513 resulting in extensive damage to both. Foam blankets were laid on fuel spills from a ruptured drop tank on 512 and a wing leak on 513. The spill from 512 was approx. 750 sq. ft. in dia. and the one on 513 was approx. 100sq ft. in dia. One crash company was secured following these operations and the other company was left on standby until the sqd. preliminary investigation was completed.

Aircraft 514 was located between runways 24R & 24L at the 6000' turnoff. Chocks & downlocks were provided prior to shutdown. Emergency vehicle stood by the aircraft until tow service became available.

Aircraft 511 was located on the Q6 24R turnoff and in no difficulty. Emergency lighting/escort service was provided by Field/Salvage follow-me vehicle.

I have 13 years & 6 months experience as a Crash Fire Captain at NAS MIRAMAR.

F. M. Oliver

The board considers Mr. OLIVER to be a creditable witness.

Authenticated:

(b) (6) [redacted]

(b) (6) [redacted] LCDR USN

Senior Member

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Enclosure (7)

WEATHER REPORT
AIRCRAFT EMERGENCY OR ON-STATION FIRE
IIND-NAS-MIR-(OPS)-3140/1 (REV. 2-64)

EMERGENCY DATA

CRASH ALARM SOUNDED AT 2224 PST | STATION FIRE ALARM SOUNDED AT _____ PST | DATE 09 DEC 1968

AIRCRAFT/PILOT

- [ ] A/C DEFERRED EMERGENCY
- [x] A/C ACTUAL CRASH
- [x] A/C CRASH DAMAGE
- [ ] PILOT INJURY
- [x] A/C ACTUAL EMERGENCY
- [ ] A/C LANDED SAFELY
- [ ] A/C FIRE

WEATHER DATA

WEATHER OBSERVATION MADE AT 2224 PST | DATE 09 DEC. 1968

SURFACE WIND DIR 270 DEG(T) | VELOCITY 01 KTS | MAX. GUST: DIR _____ VEL _____ KTS

BAROMETER STATION PRESSURE 29665 INS. | ALTIMETER 30.17 INS. | MSL — MBS

TEMPERATURE AIR 48 °F | DEW POINT 40 °F | RELATIVE HUMIDITY 74 %

SKY COVER (Give type, amount and height of each layer present)

- [ ] CLEAR SKIES
- [x] CLOUDS PRESENT

TYPE OF CLOUDS C1 | TENTHS 0.6 | HEIGHT OF LAYER — FT
TYPE OF CLOUDS _____ | TENTHS _____ | HEIGHT OF LAYER _____ FT
TYPE OF CLOUDS _____ | TENTHS _____ | HEIGHT OF LAYER _____ FT

VISIBILITY PREVAILING 2 MILES | LEAST VISIBILITY _____ MILES | DIR _____

TREND: [ ] NO CHANGE [ ] INCREASING [x] DECREASING [ ] CHANGING SLOWLY [ ] CHANGING RAPIDLY

RESTRICTIONS TO VISIBILITY (Check appropriate element if present at time)

- [x] FOG
- [x] GROUND FOG
- [ ] SMOKE
- [x] [illegible]
- [ ] RAIN
- [ ] SHOWERS
- [ ] DRIZZLE
- [ ] NO RESTRICTIONS TO VISIBILITY

REMARKS (Any pertinent weather not covered by the above)

RVV- visibility 7 miles

(b) (6) [redacted] | (b) (6) [redacted] /

DISTRIBUTION

Original: Weather Service File

If pilot injury or A/C damage occurs
3 Copies - Code AO (For C.O. of squadron to which Pilot and A/C are attached)
1 Copy - Code AO (Operations Officer)
1 Copy - Crash House/Fire Chief

AIRCRAFT/PILOT DATA

A/C TYPE A7 (2) | BUNO 154498 154500

PILOT (Name) (b) (6) [redacted] (1) (b) (6) [redacted] (2) | RANK/RATE LT19 LT19

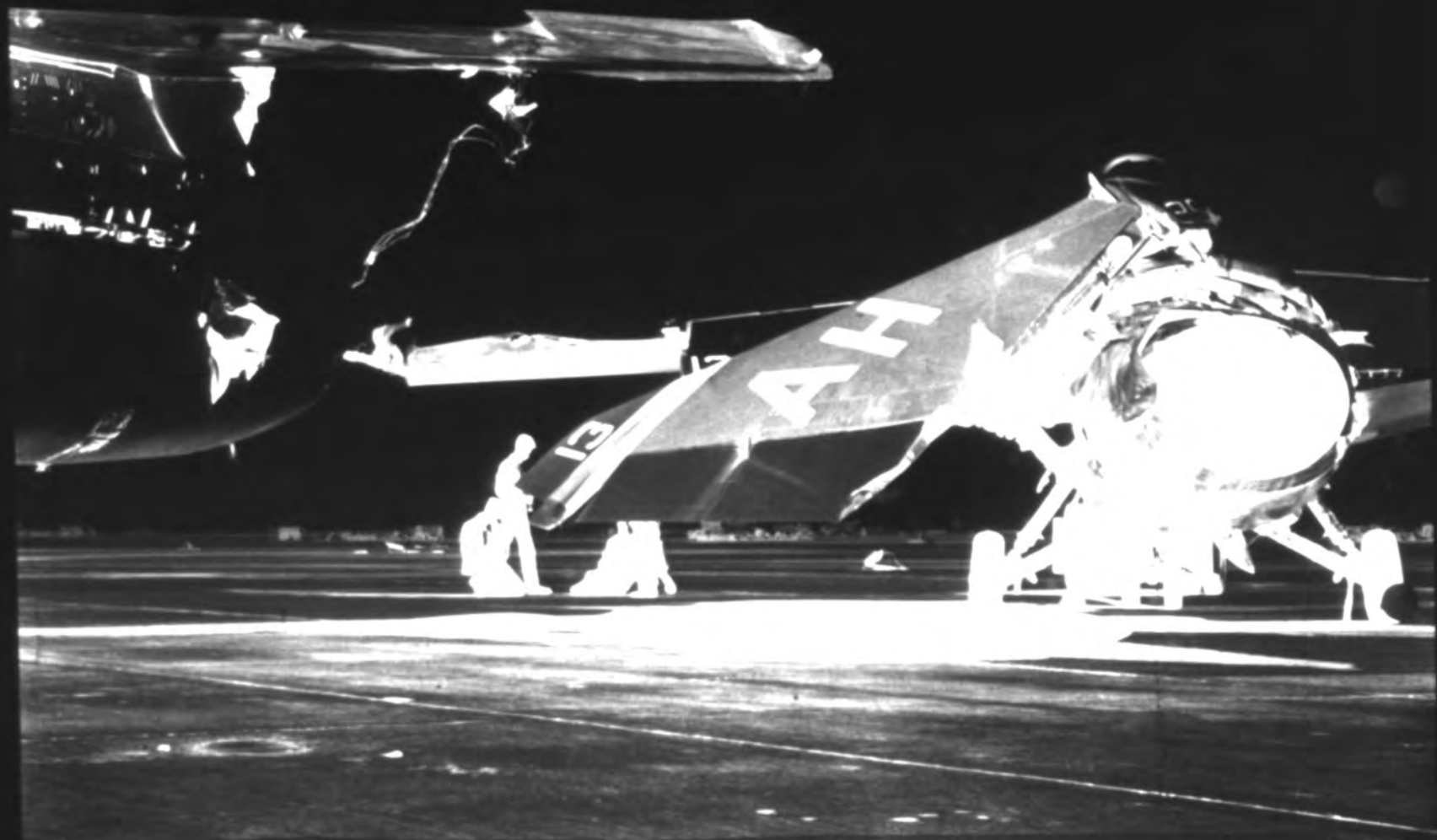
UNIT TO WHICH ATTACHED

SQUADRON VA25

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES
(Enclosure (8)

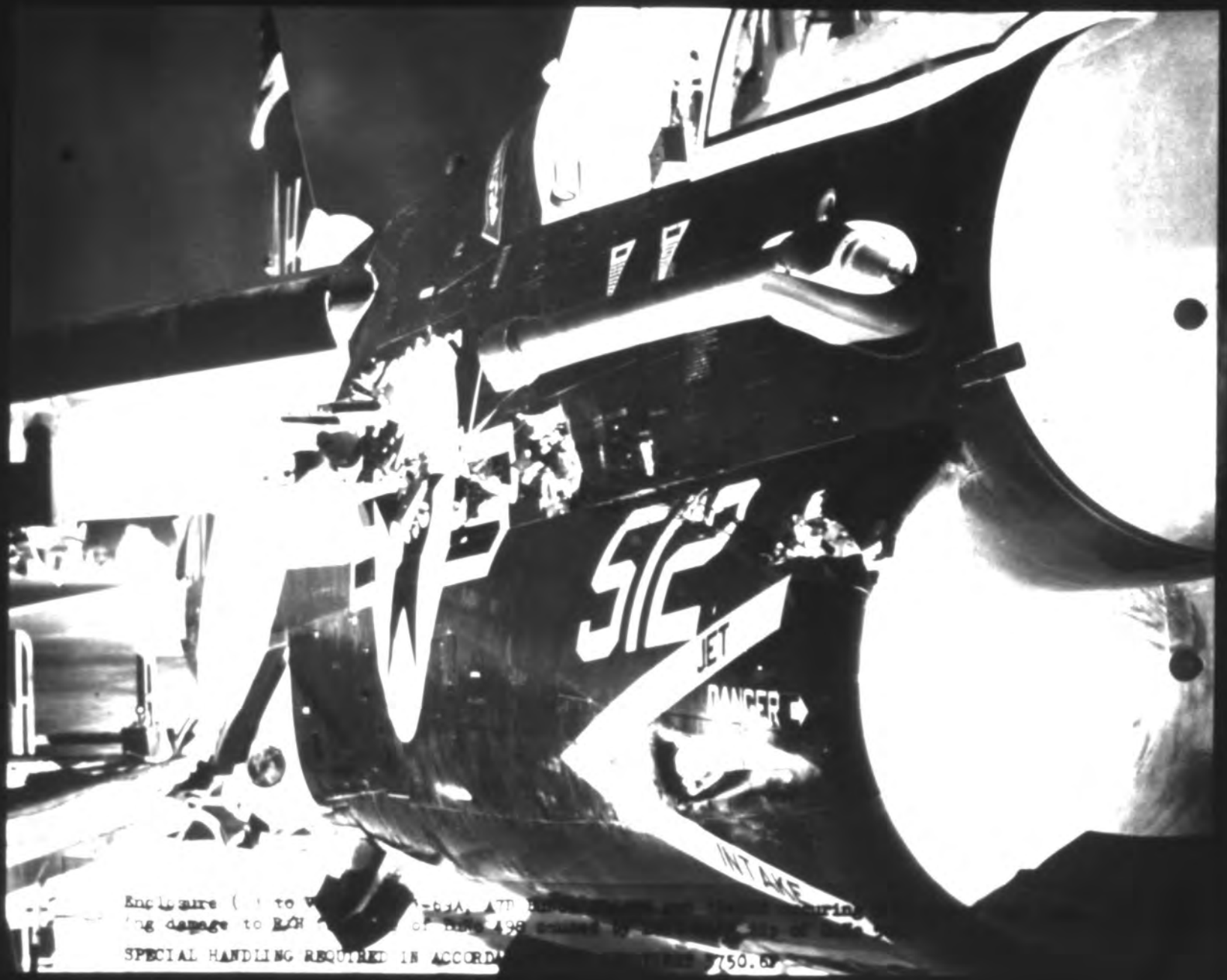
Enclosure (9) to VA-25 AAR 1-65A, ATB BuNos 154458 and 154500 occuring 9 December 1968 [illegible] long left wing of BuNo 500 and corresponding damage to right fuselage and wing of BuNo 49[illegible]

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6F



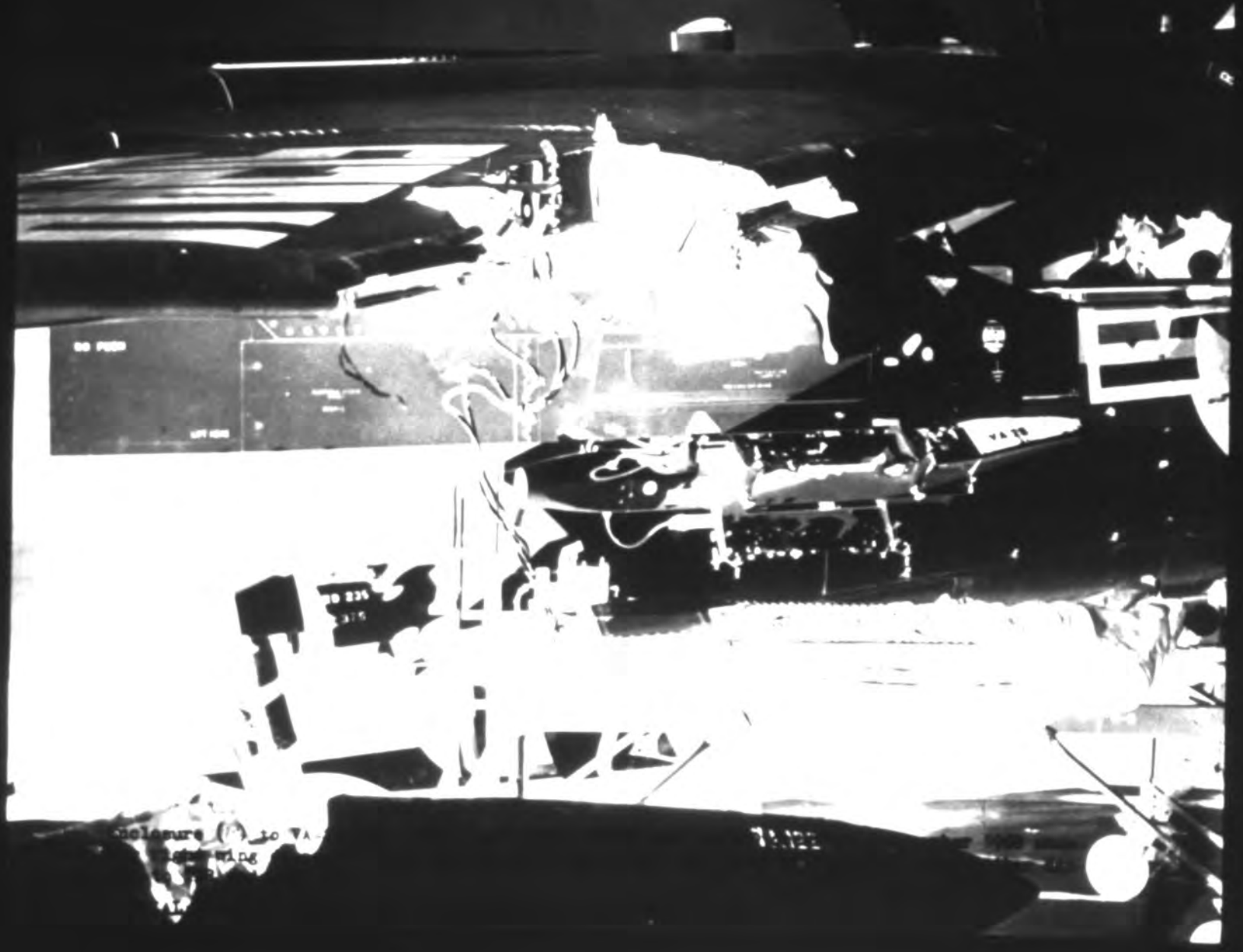
Enclosure (10) to [illegible] AAR 1-[illegible], 473 BuNos 154498 and 154500 occurring 9 December [illegible] showing center of outboard right wing of BuNo 490 (left) which contacted vert stab and eng of BuNo 500 (right).

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6F



Enclosure ( ) to V[illegible]-63A, A7D [illegible] ing damage to R/H [illegible] of [illegible] 498 [illegible]

SPECIAL HANDLING REQUIRED IN ACCORD[illegible] 750.6[illegible]



nclosure ( ) to VA-
ight wing

Enclosure ( ) to VA-25 AAR 1-69A, A7B BuNos 154498 and 154500 [redacted] 9 December 1968 showing damage to tail sect of BuNo 500.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 5750.6F

FLIGHT EXPERIENCE RESUME

COMMAND ATTACHED	PERIOD ASSIGNED	MODEL AIRCRAFT	FLIGHT HOURS	CV LNDG DAY/NIGHT	OPERATIONAL/ PROFICIENCY
		LTJG (b) (6) [redacted]			
CNABTRA	NOV 66 JUL 67	T-34 T-28	31 117	0/0 6/0	OPERATIONAL
CNAVATRA	AUG 67 DEC 67	A/TF-9J	139	6/0	OPERATIONAL
VA-122	JAN 68 OCT 68	TA-4F A-7A/B	32 103	0/0 17/6	OPERATIONAL
VA-25	NOV 68	A-7B	52	0/0	OPERATIONA
		LTJG (b) (6) [redacted]			
CNABTRA	NOV 66 OCT 67	T-34 T-28/B	28 116	0/0 4/0	OPERATIONAL
CNAVATRA	OCT 67 MAR 68	A/TF-9J	139	4/0	OPERATIONAL
VA-122	MAR 68 NOV 68	TA-4F A-7A/B	29 76	0/0 10/6	OPERATIONAL
VA-25	NOV 68	A-7B	41	0/0	OPERATIONAL

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

Statement of (b) (6) [redacted], AC1 (b) (6) [redacted] USN, Control Tower Section Leader concerning [illegible] occurring 9 Dec 1968, A7B BUNOS 154500 and 154498, pilots (b) (6) [redacted]

Local flying terminated at 2019 due to weather. VA-25 had inquired earlier as to possibilities of conducting FCLP and they were advised of the current weather. The VA-25 LSO stated that they would wait for improvement but were definitely going in the pattern if the weather improved. Prior to local flying terminating, Aerology was reporting visibility 1 mile haze. I questioned the observation and told Aerology that the restriction to visibility appeared to be fog and not haze. The forecaster said it couldn't be fog as the spread was more than 6°. Approximately 5 minutes later the observation was changed to fog. Prior to local flying starting again, the weather had moved in and out. At the time local flying commenced again, visibility was such that Sharp's Hospital, Clairemont and East San Diego was visible, the fog bank had moved to the West. I told AC2 (b) (6) [redacted] to call the VA-25 LSO and tell him of the visibility and the forecast, that the visibility would remain good as long as the wind remained out of the East and to send one aircraft around the pattern to evaluate the visibility around the pattern. After a satisfactory evaluation five aircraft were launched. Flying commenced at 2133. At approximately 2200, I informed the LSO that the fog bank might be moving in as I could no longer see Clairemont and to keep an eye on it. At approximately 2210, I told the LSO that the fog bank was at the approach end of 6L and to switch aircraft to tower discrete for full stop. The LSO wanted to keep the aircraft on LSO frequency. I disapproved his request and he said he would switch them as they came off the ball. The landing interval on runway 24R appeared normal. I told AC2 (b) (6) [redacted] the Local Controller, to have the aircraft rolling out to take it to the end to ensure interval on the runway. I heard AC2 (b) (6) [redacted] ask AH513 if he was clear of the runway. AH513 said he was not sure of his position. I told AC2 (b) (6) [redacted] to tell AH513 to keep rolling until he sees the green threshold lights then turn right. Apparently AC2 (b) (6) [redacted] did not have the time to tell AH513 to take it to the end as the collision was reported seconds later. I had been at the back-up console and moved over to the 40.82 handset and told the Field Crash truck 42 position to roll-out on an A7 Queen Ten (Number Two Marker) that apparently the A7 was hit. AC1 (b) (6) [redacted] activated the crash phone. Events that followed consisted of determining location of aircraft that landed as the West end of the field had been obscured by fog. The last A7 was landed on 24L.

(b) (6) [redacted]

The Board considers AC1 GAGE to be a creditable witness.

Authenticated:

(b) (6) [redacted]

(b) (6) [redacted] LCDR, USN
Senior Member

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 5720.6 SERIES

Enclosure (15)

Statement of (b) (6) [redacted] AC2, (b) (6) [redacted] USN Control Tower Watch Stander concerning VA-25 A-7B occurring 9 Dec 1968, A7B BUNOS 154500 and 154498, pilots (b) (6) [redacted]

When I relieved the local controller, there were five A-7's in the FCLP pattern. Shortly, thereafter, AH510 made a full stop on 24R. AH513 launched into the FCLP pattern from 24R. AH502 departed the FCLP pattern for a full stop and AH514 was launched into the FCLP pattern from 24R. AH502 was sent around at pattern altitude due to insufficient landing interval with a GCA controlled C-54, 2½ miles on final and was cleared downwind.

Due to the fog moving back over the field, all the aircraft in the FCLP pattern came up tower frequency for full stop landings. All aircraft were instructed to roll out to the end to insure minimum night time runway separation, AH504 was number one and turned clear at ten thousand foot turn-off. AH513 was number two. AH512 was number three, AH513 advised the fog was over the upwind end of the runway and he could not see. The tower asked if he was clear of the runway, pilot replied he wasn't sure where he was. All aircraft were instructed to roll out to the end, maintain right side left side separation. AH502, number four had touched down and was rolling out. AH511, number five was approaching touch down. AH513 advised the tower he had been hit from behind. The crash phone was activated, AH514, number six on final was waved off. AH502 turned off at eight thousand foot turn-off, AH511 turned off at six thousand foot turn-off. Two aircraft taxied in, the others were towed in due to reduced visibility. All aircraft had approximately 6000' of landing interval on touch down.

(b) (6) [redacted]

The board considers AC2 (b) (6) [redacted] to be a creditable witness.

Authenticated:

(b) (6) [redacted]

(b) (6) [redacted] LCDR, USN

Senior Member

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVIST 3750.6 SERIES

Enclosure (16)

Statement of LCDR (b) (6) [redacted] USN Meteorological Officer, concerning VA-25 AAR 1-69A occurring 9 DEC 68, A7B BUNOS 154500 and 154498, pilots (b) (6) [redacted]

The synoptic weather situation determined from the 0600Z (2200U 09 DEC) 10 DEC 1968 NMC Surface chart was as follows:

A high pressure area was centered over Eastern Utah and Western Colorado. A high pressure ridge extended from the center Southwesterly through Central and Southern California to another high pressure cell centered approximately 420 nautical miles southwest of San Diego. A thermal trough of low pressure existed over Baja California. A very weak offshore pressure gradient existed in the San Diego area.

The detailed weather information taken from official records at 2224U, 09 DEC 1968 was as follows:

CEILING - no ceiling existed - 6/10 cirrus clouds reported as an unknown thin broken layer (above 20,000 feet).

VISIBILITY - Two (2) miles in ground fog. (The transmissometer located near the approach end of 24L recorded 7 miles visibility).

SURFACE WIND - Light and variable; 3 knots or less.

PRECIPITATION - None

TEMPERATURE/DEW POINT - 48°/40°F

COMMENT: The visibility decreased from 7 miles at 1500U to 2 miles at 1605U and thereafter fluctuated between 1/4 and 4 miles through the 2300U observation. Ground fog patches were in the area.

(b) (6) [redacted] LCDR, USN
OFFICER IN CHARGE
NWSED
NAS MIRAMAR

Authenticated:

(b) (6) [redacted]

(b) (6) [redacted] LCDR, USN
Senior Member

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 5750.6 SERIES

Enclosure (17)

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT - PAGE 1

OPNAV FORM 3750-8 (REV. 3-63) SPECIAL HANDLING REQUIRED - See OPNAVINST 3750.6B for instructions. OPNAV REPORT 3750-7

SECTION A - IDENTIFICATION

1. FROM (Name and mailing address of activity)	2. MOR NUMBER	3. LEAVE BLANK
ATTKRON TWENTY-FIVE, NAS LEMOORE, CALIF. 93245	1-69	

4. TYPE OF MISHAP	5. TIME & DATE	6. DATE	7. GEOGRAPHICAL LOCATION
[X] ACCIDENT [ ] GROUND ACCIDENT [ ] INCIDENT	2234 [illegible]	9 DEC 68	RUNWAY 24 R, NAS, MIRAMAR CALIF.

8. MODEL A/C	9. BUNO	10. NO. OF OCCUPANTS	11. DAMAGE CODE	12. UNIT OPERATING A/C
A-7B	154500	ONE	ALPHA	VA-25

13. INDIVIDUALS INVOLVED USE ADDITIONAL SHEETS IF REQUIRED NAME (Last, first and middle initial)	14. UNIT TO WHICH ATTACHED	15. RANK/RATE	16. FILE/SERV. NO. DESIGNATOR	17. DUTY ASSIGNMENT ABOARD A/C	17. DUTY ASSIGNMENT AT MISHAP	18. DATE OF LAST PHYSICAL	19. PHYSICALLY QUALIFIED FOR FLIGHT	20. BRANCH OF SERVICE	21. INJURY CODE	22. DISPOSITION
(b) (6) [redacted]	VA-25	LT JG	(b) (6) [redacted]	P	154 500	3 APR 1968	YES	USNR	G	I
	VA-25	LT JG	[redacted]	P	154 498	12 SEP 1968	YES	USNR	G	I
C.										
D.										

23. CLARIFICATION OF ITEMS 13-22 WHEN NECESSARY

B was pilot of a/c which struck A-7B BUNO 154500.

24. MODEL OTHER A/C IF INVOLVED	25. BUNO	26. NO. OF OCCUPANTS	27. UNIT OPERATING A/C	28. DAMAGE CODE	29. MOR NO.
A-7B	154498	ONE	VA-25	ALPHA	1-69

30. NARRATIVE ACCOUNT OF MISHAP (Use additional 8 x 10½ sheets if required)

Pilots LTJG (b) (6) [redacted] and LTJG (b) (6) [redacted] were flying night FCLP landings in their squadron's A-7B A/C (#513 and #512 respectively) at NAS Miramar. After bouncing for about one-half hour, the tower noted the progress of a fog bank across the airfield, so it instructed the bouncing A-7s to approach for final landings. The first A/C to land on the 12,000 foot runway ran into a dense fog enviornment toward the end of its roll-out, and after stopping at the 1 10,000 foot area turned off and cleared the runway.

LTJG (b) (6) [redacted] in #513 was cleared by the tower to land, and after passing the 5,000 foot mark he entered the advancing fog bank. Unable to see more than a few feet in front of his centerlined A/C, he slowed rapidly to about five knots and steered slightly to the right of the centerline, informing the tower of his difficulties. The next A-7B to land rolled to a complete stop on the left half of the runway, also well within the obscuring fog.

SEE ADDENDUM # 1

31. PRIMARY CAUSE FACTOR ASSIGNED BY ACCIDENT BOARD

Pilot (b) (6) [redacted] failed to stop prior to entering fog and collided with other a/c.

32. CONTRIBUTING CAUSE FACTOR ASSIGNED BY ACCIDENT BOARD

Weather, ~~other pilots~~, facilities/ other personnel, supervisory.

33. POSSIBLE CAUSE FACTOR ASSIGNED BY ACCIDENT BOARD

34. HAVE ALL FINDINGS, CONCLUSIONS, & RECOMMENDATIONS BEEN MADE AVAILABLE TO THE A/C ACCIDENT BOARD? IF NO, EXPLAIN YES [X] NO [ ]

35. REPORT PREPARATION CHECK LIST

[X] ALL PARTS OF FORM COMPLETED [X] DRAWINGS SKETCHES, PHOTOS [X] SURVIVORS NARRATIVES [X] WITNESS STATEMENTS [X] CONCLUSIONS & RECOMMENDATIONS [X] REQUIRED COPIES FURNISHED

36. REPORT FILED BY (Name & signature of medical officer)	DATE	37. FORWARDED (Name & signature of appointing authority)	DATE
(b) (6) [redacted] (b) (6) [redacted] LCDR MC USNR	31 DEC 68	Scott L. Smith SCOTT L. SMITH CDR USN	

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

OP-057

S/N 0107-731-8000

U.S. GOVERNMENT PRINTING OFFICE: 1967 - 274-532

(ENCLOSURE # 1)

MOR 1-69, VA-25
BUNO 154500, PILOT (b) (6)
ADDENDUM #1

JG (b) (6) in #512 was next to land. He was not advised by the tower of the rapidly complicating situation at the distal end of the fog-shrouded runway, so he touched down and began to brake aero-dynamically. He heard then that the plane in front of him was stopping to the left, so he entered the fog bank at the 5,000 foot mark and started to the right. As he shot past the halted A/C to his left, he began maximum braking, blowing a mainmount tire in the process. Decelerating, he now started back toward the left side of the runway, knowing that #513 was ahead in the fog. At approximately 45 knots, #512 collided with the aft portion of the slow-moving #513, while at the 9,000 foot mark on the fog-bound runway.

Escape:

Both pilots immediately unstrapped themselves for emergency egress; but upon noting no onset of fire or other threatening condition, they exited from their upright A/C in the normal manner.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST. 3750.6F.

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT - PAGE 2

OPNAV FORM 3750-8A (REV. 3-63) SPECIAL HANDLING REQUIRED. — See OPNAVINST 3750.6E for instructions.

OPNAV REPORT 3750-7

SECTION E - FACTORS CONTRIBUTING TO OR RELATING TO MISHAP BY PHASE OF MISHAP (List in order in accordance with Section B of inst.)

1. FACTORS	2. PHASE OF MISHAP (See code at right) A	E	S	R
1. WEATHER	M			
2. POOR PILOT HEADWORK	M			
3. POOR AIR TRAFFIC CONTROL	M			

PHASE CODE: A - ACCIDENT; E - ESCAPE/EGRESS; S - SURVIVAL; R - RESCUE

FACTOR WEIGHT: M - MAJOR; C - CONTRIBUTING; Q - QUESTIONABLE OR POSSIBLE

REMARKS

1. ADVANCING FOG BANK ON DUTY RUNWAY
2. PILOT SHOULD NOT STOP ON DUTY RUNWAY IN ZERO VISIBILITY WEATHER.
3. TOWER PERSONNEL DID NOT KEEP ABREST OF RAPIDLY DEGENERATING SITUATION AND TAKE POSITIVE CONTROL.

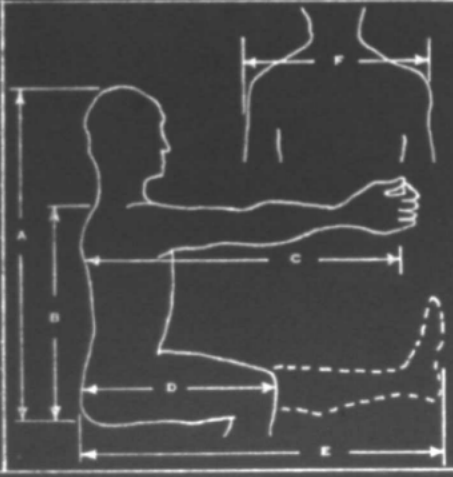
SECTION C AIR CREW DATA

1. FLIGHT TIME LAST 30 DAYS (All models)	45.3
2. FLIGHT TIME LAST 24 HOURS (All models)	.2
3. NO. FLIGHTS LAST 24 HOURS (Include present flight)	one
4. TIME AT CONTROLS THIS FLIGHT	.2
5. TOTAL FLIGHT TIME ALL MODELS	473.4

FLIGHT TIME THIS MODEL	6. TOTAL	7. LAST 30	8. 60 DAYS	9. 90 DAYS
	154.6	45.3	75.0	121.0

10. NO. GROUNDINGS PAST YEAR	NONE
11. NO. DAYS GROUNDED PAST YEAR	NONE
12. DATES AND TYPES OF PRIOR MISHAPS	NONE
13. NO. HRS. IN A DUTY STATUS LAST 24 HRS.	THREE
14. DIRECTION FACING AT TIME OF MISHAP	FOREWARD
15. LOCATION AT TIME OF MISHAP	COCKPIT

SECTION D ANTHROPOMETRIC DATA (Compare with health record)



AGE (b) (6) [redacted]

HEIGHT [redacted] IN.

WEIGHT [redacted] LB.

A. SITTING HEIGHT [redacted] IN.

B. TRUNK HEIGHT [redacted] IN.

C. FUNCTIONAL REACH [redacted] IN.

D. BUTTOCK - KNEE [redacted] IN.

E. LEG LENGTH [redacted] IN.

F. SHOULDER WIDTH (BIDELTOI[redacted] IN.

16. LABORATORY TESTS AND RESULTS

SPECIMEN		TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD	1.	NO LAB TESTS		TISSUE: (CNS)		
	2.	DONE.		MUSCLE		
	3.			VISCERA		
URINE				OTHER:		
G.I. CONTENT						

17. X-RAY RESULTS

NOT DONE

MOB NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154500	A

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

NAME OF INDIVIDUAL

(b) (6) [redacted]

OP-05

U.S. GOVERNMENT PRINTING OFFICE: 1964 - 723-375

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT - PAGE 2

OPNAV REPORT 3750-7

OPNAV FORM 3750-8A (REV. 3-63) SPECIAL HANDLING REQUIRED. — See OPNAVINST 3750.6E for instructions.

SECTION B - FACTORS CONTRIBUTING TO OR RELATING TO MISHAP BY PHASE OF MISHAP (List in order in accordance with Section B of inst.)

1. FACTORS	2. PHASE OF MISHAP (See code at right) A	E	S	R
1. WEATHER	M			
2. POOR PILOT HEADWORK	M			
3. POOR AIR TRAFFIC CONTROL	M			

PHASE CODE: A - ACCIDENT; E - ESCAPE/EGRESS; S - SURVIVAL; R - RESCUE

FACTOR WEIGHT: M - MAJOR; C - CONTRIBUTING; Q - QUESTIONABLE OR POSSIBLE

REMARKS

1. ADVANCING FOG BANK ON DUTY RUNWAY.
2. NO APPEARENT EFFORT MADE TO MAKE SHORT LANDING AND ROLL OUT TO AVOID KNOWN FOG BANK.
3. TOWER PERSONNEL DID NOT KEEP ABREAST OF RAPIDLY DEGENERATING SITUATION, BY TAKING POSITIVE CONTROL.

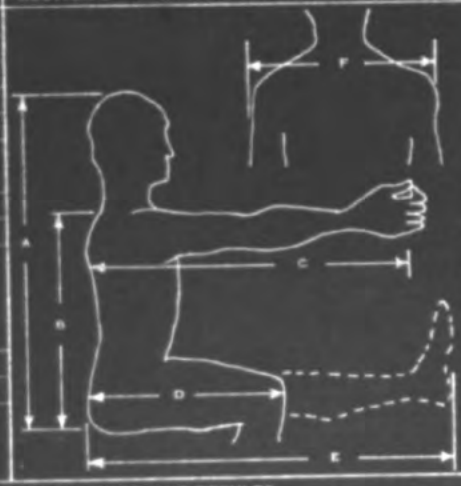
SECTION C AIR CREW DATA

1. FLIGHT TIME LAST 30 DAYS (All models)	38.7
2. FLIGHT TIME LAST 24 HOURS (All models)	0.5
3. NO. FLIGHTS LAST 24 HOURS (Include present flight)	one
4. TIME AT CONTROLS THIS FLIGHT	0.5
5. TOTAL FLIGHT TIME ALL MODELS	461.6

FLIGHT TIME THIS MODEL	6. TOTAL	7. LAST 30	8. 60 DAYS	9. 90 DAYS
	107	38.7	80.2	118.9

10. NO. GROUNDINGS PAST YEAR	one
11. NO. DAYS GROUNDED PAST YEAR	three
12. DATES AND TYPES OF PRIOR MISHAPS	NONE
13. NO. HRS. IN A DUTY STATUS LAST 24 HRS.	three
14. DIRECTION FACING AT TIME OF MISHAP	foreward
15. LOCATION AT TIME OF MISHAP	COCKPIT

SECTION D ANTHROPOMETRIC DATA (Compare with health record)



AGE (b) (6) [redacted]

HEIGHT

WEIGHT

A. SITTING HEIGHT

B. TRUNK HEIGHT

C. FUNCTION REACH

D. BUTTOCK - KNEE

E. LEG LENGTH

F. SHOULDER WIDTH (BIDELTO

16. LABORATORY TESTS AND RESULTS

SPECIMEN		TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD	1.	No lab tests		TISSUE: (CNS)		
	2.	performed		MUSCLE		
	3.			VISCERA		
URINE				OTHER:		
G.I. CONTENT						

17. X-RAY RESULTS

NOT DONE

MOR NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154498	B

NAME OF INDIVIDUAL

(b) (6) [redacted]

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

U.S. GOVERNMENT PRINTING OFFICE: 1964-744-973

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT - PAGE 3

OPNAV REPORT 3750-7

OPNAV FORM 3750-88 (REV. 3-63)

SPECIAL HANDLING REQUIRED — See OPNAVINST 3750.6E for instructions.

SECTION E

INDIVIDUAL CHRONOLOGICAL DATA

SEE PAGE 8 PARA. 10 OF INSTRUCTION

TO BE COMPLETED ON PLANE COMMANDER, PILOT, CO-PILOT, OTHER INDIVIDUAL IN CONTROL OF AIRCRAFT AT TIME OF MISHAP, AND/OR INDIVIDUAL CAUSING THE MISHAP

USE LOCAL TIME AND BRIEFLY RECORD ACTIVITY WITHIN EACH COLUMN

48 HOURS PRIOR TO MISHAP

TIME	
7 Dec 1968	
2200	I was VA-25 Duty Officer so I went to bed at the squadron.
8 Dec 1968	
0630	I arose from an undisturbed night's sleep.
0800	I was relieved as SDO.
0830	Breakfast at the BOQ. Rolls, juice, cereal, eggs, toast, and sausage.
0930	Arrived home at Hanford.
1100	Went to church.
1200	Returned from church and had a sandwich and fruit for lunch.
1300	Took a ride on my motorcycle.
1400	Visited a friend.
1700	Steak dinner in Fresno.
2230	Went to bed.
9 Dec 1968	
0800	Arose from an undisturbed night's sleep.
0830	Breakfast: Orange, milk, 2 English muffins.
1200	Caught the airlift for San Diego.
1600	Arrived at the Ticonderoga.

TIME	
Continued-	
1730	Had 2 sandwiches and 2 containers of milk on the bus to Miramar.
1900	Arrived at Miramar.
2000	Briefed.
2130	Manned aircraft.
2200	Took off.
2210	Landed.
ACCIDENT PHASE 2215	While taxying at five knots in heavy fog a/c was struck from the rear by #512.
ESCAPE PHASE 2217	Exited a/c in normal manner and began to look for LTjg DISTAD.
SURVIVAL PHASE	

TIME OF RESCUE

MOR NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154500	A

NAME OF INDIVIDU (b) (6) [redacted]

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

OP-05F

S/N 0107-731-8200

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT - PAGE 3

OPNAV REPORT 3750-7

OPNAV FORM 3750-5B (REV. 3-63)

SPECIAL HANDLING REQUIRED — See OPNAVINST 3750.6E for instructions.

SECTION E

INDIVIDUAL CHRONOLOGICAL DATA

SEE PAGE 9 PARA. 10 OF INSTRUCTION

TO BE COMPLETED ON PLANE COMMANDER, PILOT, CO-PILOT, OTHER INDIVIDUAL IN CONTROL OF AIRCRAFT AT TIME OF MISHAP, AND/OR INDIVIDUAL CAUSING THE MISHAP

USE LOCAL TIME AND BRIEFLY RECORD ACTIVITY WITHIN EACH COLUMN

48 HOURS PRIOR TO MISHAP

TIME	
7 Dec 1968	
2200	Visiting college friends in Santa Barbara.
8 Dec 1968	
0200	Went to sleep.
1030	Got up and showered.
1130	Had breakfast.
1200	Left Santa Barbara for Los Angeles.
1400	Visited with fiance's parents in L.A. area.
1500	Departed for San Diego.
1700	Had hamburger, french fries, and coffee.
1800	Visited with friends in Poway.
1930	Departed for sister's apartment in East San Diego.
2030	Visited with sister and friends.
2130	Left for town.
2230	Had Mexican dinner with 3 beers.
9 Dec 1968	
0100	Went to sleep.
0930	Got up.
1000	Had breakfast: bacon, eggs, and French toast. then sat around sister's apartment.
1130	Went to downtown SanDiego to shop.
1330	Brought gear aboard Ticonderoga.
1430	Shopped at Miramar Exchange.
1600	Had cheeseburger, fries, and lemonade at Exchange.

TIME	
Continued-	
1630	Returned to sister's apartment.
1830	Departed for NAS Miramar.
1930	Had Ham and Cheese sandwich. Briefed for hop.
2000	Waited for weather to clear for launch.
2100	Manned for night MLP period.
2110	Secured launch due to weather.
2125	Manned a second time.
2148	Took off.
2214	Landed.
ACCIDENT PHASE 2215	At approximately 45 knots while taxying in the fog struck a/c #513 in the rear.
ESCAPE PHASE 2217	Exited aircraft and began to look for LTjg (b) (6)
SURVIVAL PHASE	

TIME OF RESCUE

MOR NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-68	A-7B	154500	B

NAME OF INDIVIDUAL (b) (6)

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

OP-05F

S/N 0107-731-8200

U.S. GOVERNMENT PRINTING OFFICE: 1966-215-293

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT — PAGE 5 OPNAV REPORT 3750-7

OPNAV FORM 3750-8F (REV. 3-63) SPECIAL HANDLING REQUIRED. *See OPNAV INST 3750.6E for instructions*

SECTION G ESCAPE, PERSONAL AND SURVIVAL EQUIPMENT

LIST AND CODE IN ACCORDANCE WITH SECTION G OF INSTRUCTION: PHASE CODES: A-ACCIDENT/MISHAP E-ESCAPE/EGRESS PHASE S-SURVIVAL R-RESCUE PHASE

1. EQUIPMENT DESCRIPTION INCLUDING SPECIFIC MODEL DESIGNATION	2. MODIFICATION	3. REQUIRED	4. AVAILABLE	5. NEED	6. USED	7. FAILED	8. REMARKS (Explain failures, loss, and/or difficulty encountered. Use additional 8x10½ plain paper if needed.)
The pilot exited the aircraft in the normal manner. No escape, personal or survival equipment were used, therefore no evaluation was made.							

SECTION H NARRATIVE OF ESCAPE/EGRESS, SURVIVAL AND RESCUE PHASES

The pilot immediately unstrapped himself for emergency egress; but noting no onset of fire or other threatening condition, he exited from his upright aircraft in the normal manner.

MOR NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154500	A

NAME OF INDIVIDUAL

(b) (6) [redacted]

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

OP-001 U.S. GOVERNMENT PRINTING OFFICE: 1964-712[illegible]

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT — PAGE 5

OPNAV REPORT 3750-7

OPNAV FORM 3750-8F (REV. 3-63)

SPECIAL HANDLING REQUIRED. See OPNAV INST 3750.6E for instructions

SECTION G — ESCAPE, PERSONAL AND SURVIVAL EQUIPMENT

LIST AND CODE IN ACCORDANCE WITH SECTION G OF INSTRUCTION.

PHASE CODES: A-ACCIDENT/MISHAP E-ESCAPE/EGRESS PHASE S-SURVIVAL R-RESCUE PHASE

1. EQUIPMENT DESCRIPTION INCLUDING SPECIFIC MODEL DESIGNATION	2. MODIFICATION	3. RE-QUIRED	4. AVAIL-ABLE	5. NEED	6. USED	7. FAILED	8. REMARKS (Explain failures, loss, and/or difficulty encountered. Use additional 8x10½ plain paper if needed.)
The pilot exited the aircraft in the normal manner. No escape, personal or survival equipment were used, therefore no evaluation was made.							

SECTION H — NARRATIVE OF ESCAPE/EGRESS, SURVIVAL AND RESCUE PHASES

The pilot immediately unstrapped himself for emergency egress; but noting no onset of fire or other threatening condition, he exited from his upright aircraft in the normal manner.

MOR NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154198	B

NAME (b) (6) [redacted]

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

OP-05F

U. S. GOVERNMENT PRINTING OFFICE: 1968-712966

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT — PAGE 6

OPNAV FORM 3750-8G (REV. 3-63) — OPNAV REPORT 3750-7

SPECIAL HANDLING REQUIRED. *See OPNAV INST 3750.6E for instructions*

SECTION I — DETAILS OF ESCAPE/EGRESS/SURVIVAL PHASES REFER TO SECTION I OF INSTRUCTIONS

1. TOPOGRAPHY OF INDIVIDUAL'S LANDING SITE

☐ WATER ☒ LAND ☐ OTHER

2. TYPE OF EGRESS

☐ EJECTION ☐ BAILOUT ☐ UNDERWATER ☒ NORMAL ☐ OTHER (*State type*)

S	E		REMARKS
		3. NOT ATTEMPTED	
		4. ATTEMPTED	
	X	5. ACCOMPLISHED	NORMAL EXIT MADE
		6. THRU CANOPY	
YES	NO	EGRESS DIFFICULTIES	IF YES, EXPLAIN DIFFICULTIES
	X	7. PRIOR TO EGRESS	
	X	8. DURING EGRESS	
	X	9. SUBSEQUENT TO EGRESS	

10. GIVE TYPE AND MODEL OF EJECTION SEAT USED

11. METHOD OF FIRING SEAT ☐ PRIMARY ☐ SECONDARY ☐ OTHER

12. SEQUENCE OF EJECTION

13. POSITION OF SEAT ON EJECTION ☐ UP ☐ DOWN ☐ FORWARD ☐ AFT ☐ OTHER

14. ATTITUDE OR MANEUVER OF A/C AT EXIT

15. AIRSPEED

16. ALTITUDE AT TIME OF EXIT (FEET) ABOVE SEA LEVEL ____ ABOVE TOPOGRAPHY ____

17. ALTITUDE OF PARACHUTE OPENING

18. WEIGHT

19. TIME IN WATER

20. TIME IN RAFT

21. WIND VELOCITY

22. WAVE HEIGHT

23. WAVE INTERVAL

24. AIR TEMPERATURE

25. WATER TEMPERATURE

26. VISIBILITY ZERO

27. ALERTING FACTORS

Radio Communication with tower.

28. MEANS OF LOCATING ACCIDENT SITE

Radio communication with tower.

29. MEANS OF LOCATING SURVIVOR

Radio communication with tower.

30.

31.

32.

33.

34.

35.

36. DID INDIVIDUAL DEPART FROM LANDING SITE? (*If Yes, Explain reason and sequence up to rescue*)

☒ NO ☐ YES

SECTION J — TRAINING FACTORS

1. DATE OF LAST TRAINING

LPC 4 APRIL 1968 EJECTION TOWER 4 APRIL 1968 EJECTION SEAT 4 APRIL 1968 SURVIVAL MAY 68

2. DID THE LACK OF TRAINING AND/OR EXPERIENCE PLAY A PART IN ANY PHASE OF THIS MISHAP? (*If yes, explain*)

☒ NO ☐ YES

MOR NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154500	A

NAME (b) (6) [redacted]

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

OP 05F

☆ U.S. GOVERNMENT PRINTING OFFICE: 1964—712966

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT — PAGE 6

OPNAV REPORT 3750-7

OPNAV FORM 3750-EG (REV. 3-63)

SPECIAL HANDLING REQUIRED. *See OPNAV INST 3750.6E for instructions*

SECTION I — DETAILS OF ESCAPE/EGRESS/SURVIVAL PHASES REFER TO SECTION I OF INSTRUCTIONS

1. TOPOGRAPHY OF INDIVIDUAL'S LANDING SITE

☐ WATER ☒ LAND ☐ OTHER

2. TYPE OF EGRESS

☐ EJECTION ☐ BAILOUT ☐ UNDERWATER ☒ NORMAL ☐ OTHER *(State type)*

YES	NO		REMARKS
		3. NOT ATTEMPTED	
		4. ATTEMPTED	
	X	5. ACCOMPLISHED	NORMAL EXIT MADE
		6. THRU CANOPY	
YES	NO	EGRESS DIFFICULTIES	IF YES, EXPLAIN DIFFICULTIES
	X	7. PRIOR TO EGRESS	
	X	8. DURING EGRESS	
	X	9. SUBSEQUENT TO EGRESS	

10. GIVE TYPE AND MODEL OF EJECTION SEAT USED

11. METHOD OF FIRING SEAT ☐ PRIMARY ☐ SECONDARY ☐ OTHER

12. SEQUENCE OF EJECTION

13. POSITION OF SEAT ON EJECTION ☐ UP ☐ DOWN ☐ FORWARD ☐ AFT ☐ OTHER

14. ATTITUDE OR MANEUVER OF A/C AT EXIT

15. AIRSPEED

16. ALTITUDE AT TIME OF EXIT (FEET) ABOVE SEA LEVEL ____ ABOVE TOPOGRAPHY ____

17. ALTITUDE OF PARACHUTE OPENING

18. WEIGHT

19. TIME IN WATER

20. TIME IN RAFT

21. WIND VELOCITY

22. WAVE HEIGHT

23. WAVE INTERVAL

24. AIR TEMPERATURE

25. WATER TEMPERATURE

26. VISIBILITY ZERO

27. ALERTING FACTORS

Radio communication with tower.

28.

29.

30. MEANS OF LOCATING ACCIDENT SITE

Radio communication with tower.

32.

33.

31. MEANS OF LOCATING SURVIVOR

Radio communication with tower.

34.

35.

36. DID INDIVIDUAL DEPART FROM LANDING SITE? *(If Yes, Explain reason and sequence up to rescue)*

☒ NO ☐ YES

SECTION J — TRAINING FACTORS

1. DATE OF LAST TRAINING

LPC 15 APRIL 1968 EJECTION TOWER 4 APRIL 1968 EJECTION SEAT 4 APRIL 1968 SURVIVAL MAY 1968

2. DID THE LACK OF TRAINING AND/OR EXPERIENCE PLAY A PART IN ANY PHASE OF THIS MISHAP? *(If yes, explain)*

☒ NO ☐ YES

MON NO.	MODEL A/C	BUNO	IDENTIFICATION OF INDIVIDUAL
1-69	A-7B	154498	B

Special Handling Required in Accordance with OPNAVINST 3750.6 Series

NAME OF INDIVIDUAL (b) (6) [redacted]

OP-05F

Supp. 2 Contains Training Over Age 12 Mos

Conclusions:

This roll-out collision between two jet aircraft was the direct result of fog-induced zero visibility on the ground. There were no significant medical or mechanical factors involved.

Both pilots made mistakes. LTJG (b) (6) [redacted] should not have come to a near-stop while his aircraft was not completely clear of the duty runway, especially when his (and everyone else's) vision was totally obscured by fog....and most especially when he knew that his squadron-mates were still landing behind him. He should have turned off before he entered the advancing fog bank if at all possible, but certainly he should have gotten off the runway when he lost visibility even at the risk of running over a runway light or two.

LTJG (b) (6) [redacted] also should have avoided going IFR on the ground by either waving off or by at least landing short and decelerating as rapidly as possible. Once he had entered the fog bank at normal roll-out speed, he had no alternative but to collide with at least one of his squadrons's airplanes.

In retrospect, the tower should not have been clearing aircraft to land while the distal half of the runway was fogbound. Two more pilots now know that the flight is not complete when the wheels have touched the concrete.

Recommendations:

No recommendations concerning medical or survival training or equipment were suggested by this accident.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST. 3750.6F

ORIGINAL

ATTACK SQUADRON TWENTY FIVE
FLEET POST OFFICE
SAN FRANCISCO 96601

VA25:02
3750
Ser1 48
14 MAR 1969

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6 SERIES

From: Commanding Officer, Attack Squadron 25, FPO San Francisco 96601
To: Commander, Naval Safety Center, Naval Air Station, Norfolk, Virginia 23511
Via: Commander, Naval Air Force, U. S. Pacific Fleet, Naval Air Station, North Island, San Diego, California 92135

Subj: ATKRON 25 AAR Serial 1-69A; comments concerning

Ref: (a) COMFAIRALAMEDA ltr Ser 80/838 of 5 Mar 69

1. During the course of investigation and analysis of subject accident, the Board did, in fact, consider the actions of each pilot in the flight in light of preventing the accident. LTJG (b) (6) stated that he transmitted on tower frequency the fact that he was not clear of the runway and was in the fog shortly after LTJG (b) (6) first requested permission to land. Shortly thereafter, LTJG (b) (6) saw the turnoff at 2,000 feet-to-go and transmitted his intentions to make a left 270 degree turn as he had rolled just beyond the turnoff. During this time LTJG (b) (6) was cleared to land while he was on final. LTJG (b) (6) switched to ground control after he cleared the runway and did not know of the collision until sometime later. LTJG (b) (6) considered that his transmissions concerning the lack of visibility, and the fact that he was still attempting to clear the runway while others were requesting permission to land were sufficient indication to all concerned that the visibility was restricted, the runway was not clear, and increased separation would be advisable. It is obvious that LTJG (b) (6) was quite busy while looking for the turnoff and then executing a 270 degree turn in the fog. It is felt that his transmissions were both adequate and commendable. They were not, however, acknowledged by the tower personnel. LTJG (b) (6) states that he did hear LTJG (b) (6) transmissions and he assumed that he was clearing the runway at the time he was touching down. As stated in the AAR, none of the pilots, nor the tower personnel could comprehend just how dense the fog was until everyone concerned had more or less comitted themselves to one course of action, that being rolling out after landing.

2. The AAR did not include LTJG (b) (6) statement as it was felt that the analysis adequately described his actions concerning this accident. The foregoing paragraph should clarify any questions concerning this intended omission.

S. L. Smith
S. L. SMITH

Copy to:
COMFAIRALAMEDA
COMNAVSAFECEN (2)
COMNAVAIRPAC
NAVAIRSYSCOMHQ (AIR-09E)
NAVAIRTESTCEN
NAVPLANTREPO DALLAS
CO, MIRAMAR
COMATKCARAIRWING 16

ORIGINAL ENCLOSURE(19)

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

NO TRANSMITTAL LETTER REQUIRED

REPORT SYMBOL NAVWEPS 11135-1

STATION AND LOCATION	DATE OF REPORT	AFRR NO.
Naval Air Station MIRAMAR, California 92145	9 December 1968	S.69
	DATE AND TIME OF INCIDENT: 9 December 1968 2223	ON STATION: X / OFF STATION:
REPORTING CUSTODIAN	MODEL AIRCRAFT INVOLVED: A7B VA-25	BUREAU NO: 156698 154500

TO: Chief, Bureau of Naval Weapons (SEEQ) AIR 4232

VIA — MILITARY COMMAND: Commander, Fleet Air MIRAMAR

SIGNATURE:

EXACT LOCATION OF INCIDENT: Approximately 8500' Mark Runway 24R

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

ESTIMATED CAUSE: Aircraft collision on runway

CONDITIONS AT TIME OF INCIDENT

GENERAL WEATHER PICTURE: High clouds No ceiling and 2 mile visibility

WIND DIRECTION: Variable

WIND VELOCITY (mph): 3 knots

TEMPERATURE (°F): 48 degrees

NATURE OF TERRAIN AT AND IN APPROACH TO INCIDENT: Concrete

LIQUID FUEL QUANTITY

ESTIMATED ON BOARD BEFORE INCIDENT (lbs): #1 - 3500 #2 - 3500

ESTIMATED ON BOARD AFTER INCIDENT (lbs):

ESTIMATED SPILL AREA (Size in feet): 750 and 100

OTHER FUELS: None

PERSONNEL RESCUE

NO. PERSONNEL ON BOARD AIRCRAFT	1 ea.
NO. PERSONNEL SURVIVED	2
NO. PERSONNEL ESCAPED UNAIDED	2
NO. PERSONNEL RESCUED	0

DESCRIBE RESCUE METHODS USED: NA

FIRE FIGHTING

FIRST METHOD OF ALARM USED						TIME RECORD
TWO-WAY RADIO		EMERGENCY INTER-COM.		EMERGENCY PHONE	X	TIME ALARM RECEIVED: 2223
OTHER METHOD (State)						TIME EQUIPMENT ARRIVED:

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
MB-1	0	1	3	1 Light Water	None
MB-5	0	1	3	0	"
MB-5	0	0	4	4 Light Water	"
Q4	0	1	3	0	"
TAU	0	1	1	0	"

STATION EQUIPMENT OUT OF SERVICE

TYPE	DEFICIENCY	NO. OF DAYS	EXPLAIN DELAYS TO REPAIR
MB-1	Undergoing rehabilitation	188	

(b) (6) [redacted]

FULL DESCRIPTION OF FIREFIGHTING OR PROTECTION AT INCIDENT

At 2223 this date crash alarm received, reporting aircraft collision on runway 24R at Q10. No delay was experienced in initial response, but, on reaching the 5000' marker, severe fog conditions were encountered. Visibility being practically zero, all vehicles were requested to use extreme caution and to locate and advise of the condition of 6 aircraft the control tower reported being in the area.

The alert runway crew, on standby at the 10,000' marker, reported via radio that aircraft 504 had cleared the runway at that point and was in no apparent difficulty. They were requested to remain with the aircraft. In addition to providing emergency lighting, they later escorted the aircraft to a position near the control tower.

Another crash company located aircraft 502 between runways 24R and 24L at the 8000' mark. This crew escorted the aircraft across 24R and to the fuel pit area. Dewalocks were installed and the aircraft taxied to VF-111 Line.

Two crash companys located aircraft 512 and 513 on runway 24R at approximately the 8500' mark. Both pilots were clear of their aircraft and apparently uninjured. Their safety and a no-fire condition was reported to control tower. A collision had occured between the 2 aircraft; their condition and appearance indicating that 512 struck 513 resulting in extensive damage to both. Foam blankets were laid on fuel spills from a ruptured drop tank on 512 and a wing leak on 513. The spill from 512 was approximately 750 square feet in diameter and the one on 513 was approximately 100 square feet in diameter. One crash company was secured following these operations and the other company was left on standby until the squadron preliminary investigation was completed.

Aircraft 514 was located between runways 24R and 24L at the 6000' turnoff. Checks and dewalocks were provided prior to shutdown. Emergency vehicle stood by the aircraft until tow service became available.

Aircraft 511 was located on the Q6 24R turnoff and in no difficulty. Emergency lighting/escort service was provided by Field/Salvage follow-me vehicle.

0005 - All aircraft involved in incident and all crash equipment clear of field.

DIAGRAMS OF INCIDENT SHOWING WING, DIRECTION APPROACH OF
EQUIPMENT, POSITION OF AIRCRAFT, BIRMACKS, ETC.
(Maps and photographs should be included, if significant)

RECEIVED
NAVAL SAFETY
CENTER
2 JAN 69 10 49

DESCRIPTION OF DIFFICULTIES IN FIRE CONTROL AND EXTINGUISHMENT DUE TO UNUSUAL CONDITIONS OR EQUIPMENT AND/OR AGENT INADEQUACIES

No difficulty encountered.

RECOMMENDATIONS FOR IMPROVEMENTS IN EQUIPMENT AND/OR PROCEDURES TO INCREASE EFFICIENCY

No recommendations.

MONETARY LOSSES (*Estimated*)

PERCENT DAMAGE BY IMPACT	PERCENT DAMAGE BY FIRE	LOSS TO SURROUNDING PROPERTY
100	NA	None

DATE	PREPARED BY (Name and title)	SIGNATURE
9 Dec 1968	(b) (6) [redacted] Fire Chief	
9 Dec 1968	(b) (6) [redacted] LCDR USN	

NNNNZCZCNASCB937CZCSLB242
PTTUZYUW RUWNMFU0665 3490715-UUUU--RUCILSA.
ZNR UUUUU ZYO RUWNMFA
R 140718Z DEC 68
FM USS TICONDEROGA
TO RUWJAPA/NAS MIRAMAR
INFO RUEBBHE/NAVAIRSYSIOMNQ
RUWJMUA/NAVAIRSYSCOMREPAC
RUWJMUA/COMNAVAIRFAC
RUWMHVA/COMFAIRALAMEDA
RUWMHVA/NAVAIREWORKFAC ALAMEDA
RUWJAPA/COMFAIRMIRAMAR
RUWJMUA/NAS NORIS
RUCILSA/NAVSAFECEN
RUWJAPA/ATKRON TWO FIVE DET MIRAMAR
BT
UNCLAS
VA-25 AAR 1-69A BUNOS 154500/154498
A. CFAA 122049Z DEC 68
B. CPNAVINST 3750.6F
1. INVESTIGATION/ANALYSIS OF SUBJ A7B ACFT COMPLETED. AAR BOARD
AUTH REL NAS MIRAMAR CWD FFT WARF ALAMEDA.
BT
0665

A937/68

M+M

(b) (6) [redacted]

(2) A7B/154500 154498 VA-25 1-69A 12/9/68 DEC 1407182

Make

NNNN

TSWZFRLFGQP
PCSLA776
PTTUZYUW RUWJAPA0315 3451255-UUUU--RUCILSA.
ZNR UUUUU
P R 101255Z DEC 68
FM ATKRON TWO FIVE DET MIRAMAR
TO RUENAAA/CNO
RUCILSA/NAVSAFECEN
RUEBBHB/NAVAIRSYSCOMHQ
RUWJMUA/NAVAIRSYSCOMREPAC
RUWMHVA/NAVAIREWORKFAC NAS ALAMEDA
RUWJHEA/COMELEVEN
INFO RUEBBHB/CHNAVMAT
RUWJMUA/COMNAVAIRPAC
RUWMHVA/COMFAIRALAMEDA
RUWTATB/NAVPLANTREPO DALLAS
RUWMMFU/COMATKCARAIRWING ONE SIX
RUEOHRA/NAVAIRTECHSERVFAC
RUEBEEA/NAVAIRTESTCEN PAXRIV
RUCILMA/COMNAVAIRLANT
ZEN/COMREDATKCARAIRWING ONE TWO
RUCLSKA/COMREDATKCARAIRWING FOUR
RUWMHMA/NAS LEMOORE
ZEN/NAS MIRAMAR
ZEN/COMFAIRMIRAMAR
RUWJABA/DAS NORTON AFB CALIF
RUWMHMA/ATKRON ONE TWO TWO
RUCLSKA/ATKRON ONE SEVEN FOUR
RUWMHMA/ATKRON EIGHT SEVEN
RUWMMFM/ATKRON ONE FOUR SIX
RUEBJUA/ATKRON EIGHT SIX
RUWMMFV/ATKRON ONE ZERO FIVE
RUWMMFV/ATKRON THREE SEVEN
RUWMMFM/ATKRON TWO ONE FIVE
RUEBJUA/ATKRON EIGHT TWO
RUWMHMA/ATKRON ONE ONE THREE
RUWJAHA/NAVMISCEN PT MUGU
RUWMMFU/ATKRON TWO FIVE
RUWMMFU/USS TICONDEROGA
BT
UNCLAS FOR OFFICIAL USE ONLY
PRELIM/SUPP MSG RPT OF ACFT ACCIDENT
A. OPNAVINST 3750.6F
1. 09 DEC, 2224U, NIGNT
2. RNWY 24 R, NAS MIRAMAR

A232

ACTION
AAR

81209101

A7B - 154500 VA-25
Count ACFT {A7B - 154498 VA-25
1-69A 12 968.

101255Z/DEC

3. A7B 154500 AND A7B 154498
4. VA-25 AAR 1-69A
5. ESTIMATE BOTH ACFT CHARLIE DAMAGE, ONE POSSIBLE ALPHA. BUNO 154500 OUTER 3 FT OF LEFT WING BUCKLED AND SEVERED. PORT UHT, ACTUATING CYLINDER AND SUPPORTING FUSELAGE STA SEVERED FROM AIRFRAME. VERT STAB SEVERED FROM FUSELAGE. AFT 6 FT OF FUSELAGE/ TAILPIPE BUCKLED. ENG TRUBINE DAMAGED. BUNO 154498 - STBD MID FUSELAGE RIPPED FROM INTAKE TO WING ROOT 0 MAX DEPTH/HEIGHT ODLAPPROX 1 FT. STBD WING L/E OUTER PANEL BUCKLED. ENG FOD. ESTIMATE 1000 PLUS MAN HRS REPAIR BOTH ACFT IN ADDITION TO MAJOR COMPONENT REPLACEMENT.
6. (b) (6) [redacted], LTJG, (b) (6) [redacted] USN, (b) (6) [redacted] ACTIVE, GOLF. 450 HRS TOTAL, 150 HRS A7A/B, 100 HRS LAST 90 DAYS, BUNO 154500. (b) (6) [redacted] LTJG, (b) (6) [redacted] USN, (b) (6) [redacted] ACTIVE, GOLF. 430 HRS TOTAL, 165 HRS A7A/B, 90 HRS LAST 90 DAYS, BUNO 154498
7. NONE
8. NONE
9. NIGHT FMLP, 3A3, .4 (b) (6) [redacted]
10. LANDING ROLLOUT
11. NIGHT LSO CONTROLLED FMLP
AT NAS MIRAMAR, 5 A7B ACFT IN PATTERN. PILOTS REPORTED FOG BANK FORMING AT SW END OF RNWY 24R AND MOVING NE. BUNO 154500 AT 180 POSIT WHEN TWR INSTRUCTED ALL ACFT TO MAKE FINAL LNDG. BUNO 154500 TOUCHED DOWN ON SPEED 1200 FT DOWN 13,000 FT RNWY. ACFT SLOWED TO 10 KTS AS THICK FOG BANK ENTERED WITH APPROX 5000 FT REMAINING. PILOT (b) (6) [redacted] REPORTED UNABLE TO SEE RNWY LIGHTS/ DISTANCE MARKERS. NEXT ACFT ON INITIAL ROLLOUT COMMENCED EARLY BRAKING AND TRANSMITTED INTENTION TO TAKE LEFT SIDE OF RNWY. FIRST PILOT TRANSMITTED TAKING RIGHT. THIRD ACFT, BUNO 154498, TOUCHED DOWN ON SPEED AT MIRROR ON CENTERLINE AND OVERTOOK SECOND ACFT AT APPROX 5,000 REMAINING. THIRD ACFT COLLIDED WITH FIRST WITH 3,500 FT REMAINING NEAR RNWY CENTER AT ESTIMATED 20-40 KT RELATIVE SPEED. OVERTAKING PILOT SAW EACH ACFT AT APPROX 50 FT AND USED MAX BRAKING AFTER OVERTAKING FIRST. BUNO 154500 TRAVELED 90 FT AND TURNED 90 DEG RIGHT STOPPING WITH NOSE WHEEL 6 FT OFF RNWY EDGE. PILOT TRANSMITTED COLLISION REPORT AND SECURED ENG WITH FUEL MASTER AS THROTTLE INEFFECTIVE. EGGRESS MANUAL. BUNO 154498 SKIDDED BROADSIE FOR 150 FT FOL COLLISION STOPPING NEAR CENTERLINE HEADING 120 DEG LEFT OF CENTERLINE. PILOT SECURED ENG AND EGGRESSED MANUALLY. NO FIRE. CRASH CREW DELAYED 10 MIN DUE FOG.
12. AEROLOGY WX RPT HIGH THIN BROKEN 2FM WIND 30 DEG RELATIVE TO RNWY 24 AT 1 KT. TEMP 48 DEWPT 40. RVV 7 MI AT APPCH END RNWY 24. PILOT /CRASH CREW RPT VSBY 50 FT AT SCENE.
13. NONE
14. NONE
15. NONE
16 REMAINING 2 ACFT LANDED RNWY 24L DURING AND IMMED FOL ACCIDENT. UNABLE TO TAXI UNTIL "FOLLOW ME" TRUCK ALONGSIDE DUE VSBY. REQUEST P AND E EVAL. OF DAMAGE FROM NAR F ALAMEDA. VA-25 LIV REP ON SCENE.
17. (b) (6) [redacted], LT, VA-25 ASO, PHONE (b) (6) [redacted], VF-111 SDO UNTIL 12 DEC, THEN USS TICONDEROGA.
BT
0315

1012552/DEC