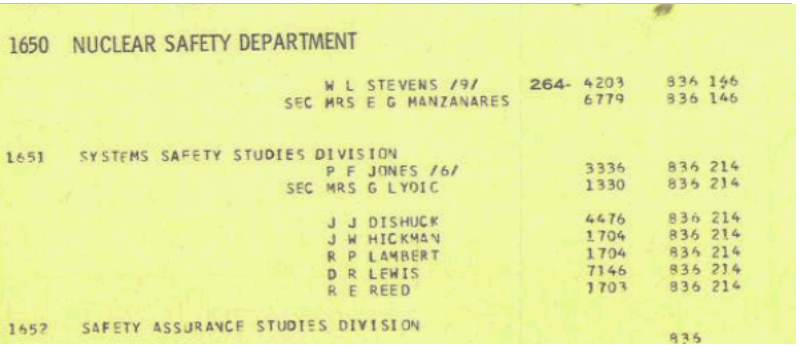
SAND2017-1525C



1650 NUCLEAR SAFETY DEPARTMENT

W L STEVENS /9/	264-	4203	836 146
SEC MRS E G MANZANARES		6779	836 146
1651 SYSTEMS SAFETY STUDIES DIVISION			
P F JONES /6/		3336	836 214
SEC MRS G LYDIC		1330	836 214
J J DISHUCK		4476	836 214
J W HICKMAN		1704	836 214
R P LAMBERT		1704	836 214
D R LEWIS		7146	836 214
R E REED		1703	836 214
1652 SAFETY ASSURANCE STUDIES DIVISION			836

Turning Point: Establishing an Independent Safety Organization within Sandia National Laboratories

Rebecca Ullrich

January 26, 2017

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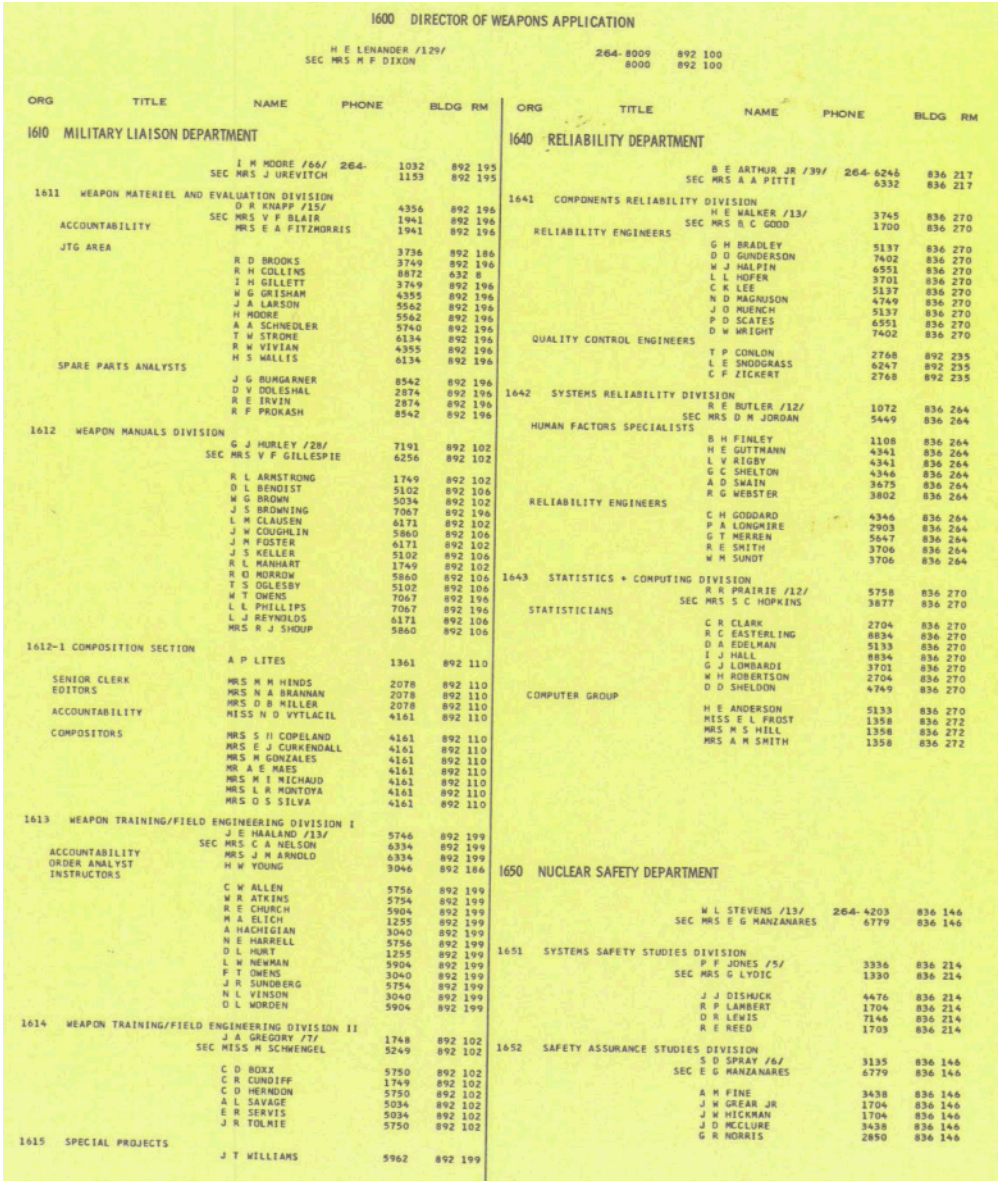
Turning Point



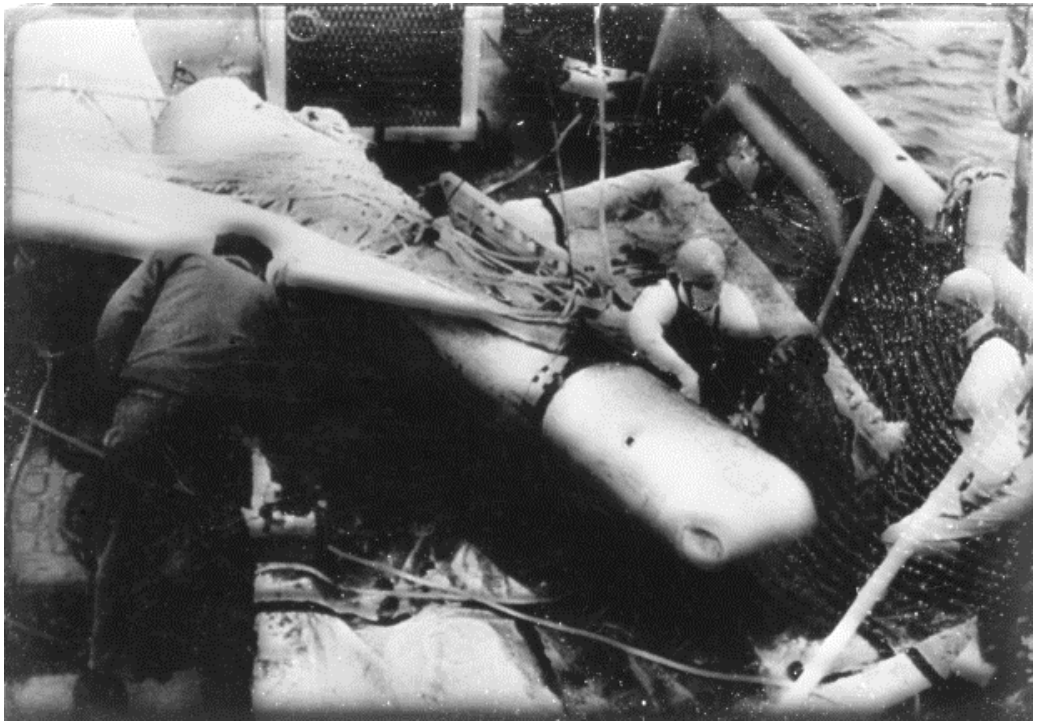
1600 DIRECTOR OF WEAPONS APPLICATION

H E LENANDER /129/ 264-8009 892 100
SEC MRS M F DIXON 8000 892 100

ORG	TITLE	NAME	PHONE	BLDG	RM
1610	**MILITARY LIAISON DEPARTMENT**				
		I M MOORE /66/ 264-	1032	892	195
	SEC MRS J UREVITCH		1153	892	195
1611	WEAPON MATERIEL AND EVALUATION DIVISION				
		D R KNAPP /15/	4356	892	196
	SEC MRS V F BLAIR		1941	892	196
	ACCOUNTABILITY	MRS E A FITZMORRIS	1941	892	196
	JTG AREA		3736	892	186
		R D BROOKS	3749	892	196
		R H COLLINS	8872	632	B
		I H GILLETT	3749	892	196
		W G GRISHAM	4355	892	196
		J A LARSON	5562	892	196
		H MOORE	5562	892	196
		A A SCHNEDLER	5740	892	196
		T W STROME	6134	892	196
		R W VIVIAN	4355	892	196
	SPARE PARTS ANALYSTS	H S WALLIS	6134	892	196
		J G BUNGARNER	8542	892	196
		D V DOLESHAL	2874	892	196
		R E IRVIN	2874	892	196
		R F PROKASH	8542	892	196
1612	WEAPON MANUALS DIVISION				
		G J HURLEY /28/	7191	892	102
	SEC MRS V F GILLESPIE		6256	892	102
		R L ARMSTRONG	1749	892	102
		D L BENOIST	5102	892	106
		W G BROWN	5034	892	102
		J S BROWNING	7067	892	196
		L M CLAUSEN	6171	892	102
		J W COUGHLIN	5860	892	106
		J M FOSTER	6171	892	102
		J S KELLER	5102	892	106
		R L MANHART	1749	892	102
		R O MORROW	5860	892	106
		T S OGLESBY	5102	892	106
		W T OWENS	7067	892	196
		L L PHILLIPS	7067	892	196
		L J REYNOLDS	6171	892	106
		MRS R J SHOUP	5860	892	106
1612-1	COMPOSITION SECTION				
		A P LITES	1361	892	110
	SENIOR CLERK	MRS M M HINDS	2078	892	110
	EDITORS	MRS N A BRANNAN	2078	892	110
		MRS D B MILLER	2078	892	110
	ACCOUNTABILITY	MISS N D VYTLACIL	4161	892	110
	COMPOSITORS	MRS S H COPELAND	4161	892	110
		MRS E J CURKENDALL	4161	892	110
		MRS M GONZALES	4161	892	110
		MR A E MAES	4161	892	110
		MRS M I MICHAUD	4161	892	110
		MRS L R MONTOYA	4161	892	110
		MRS O S SILVA	4161	892	110
1613	WEAPON TRAINING/FIELD ENGINEERING DIVISION I				
		J E HAALAND /13/	5746	892	199
	SEC MRS C A NELSON		6334	892	199
	ACCOUNTABILITY	MRS J M ARNOLD	6334	892	199
	ORDER ANALYST	H W YOUNG	3046	892	186
	INSTRUCTORS	C W ALLEN	5756	892	199
		W R ATKINS	5754	892	199
		R E CHURCH	5904	892	199
		M A ELICH	1255	892	199
		A HACHIGIAN	3040	892	199
		N E HARRELL	5756	892	199
		D L HURT	1255	892	199
		L W NEWMAN	5904	892	199
		F T OWENS	3040	892	199
		J R SUNDBERG	5754	892	199
		N L VINSON	3040	892	199
		D L WORDEN	5904	892	199
1614	WEAPON TRAINING/FIELD ENGINEERING DIVISION II				
		J A GREGORY /7/	1748	892	102
	SEC MISS M SCHWENGEL		5249	892	102
		C D BOXX	5750	892	102
		C R CUNDIFF	1749	892	102
		C D HERNDON	5750	892	102
		A L SAVAGE	5034	892	102
		E R SERVIS	5034	892	102
		J R TOLMIE	5750	892	102
1615	SPECIAL PROJECTS				
		J T WILLIAMS	5962	892	199

ORG	TITLE	NAME	PHONE	BLDG	RM
1640	**RELIABILITY DEPARTMENT**				
		B E ARTHUR JR /39/ 264-	6246	836	217
	SEC MRS A A PITTI		6332	836	217
1641	COMPONENTS RELIABILITY DIVISION				
		H E WALKER /13/	3745	836	270
	SEC MRS B C GOOD		1700	836	270
	RELIABILITY ENGINEERS	G H BRADLEY	5137	836	270
		D O GUNDERSON	7402	836	270
		W J HALPIN	6551	836	270
		L L HOFER	3701	836	270
		C K LEE	5137	836	270
		N D MAGNUSON	4749	836	270
		J O MUENCH	5137	836	270
		P D SCATES	6551	836	270
		D W WRIGHT	7402	836	270
	QUALITY CONTROL ENGINEERS	T P CONLON	2768	892	235
		L E SNODGRASS	6247	892	235
		C F ZICKERT	2768	892	235
1642	SYSTEMS RELIABILITY DIVISION				
		R E BUTLER /12/	1072	836	264
	SEC MRS D M JORDAN		5449	836	264
	HUMAN FACTORS SPECIALISTS	B H FINLEY	1108	836	264
		H E GUTTMANN	4341	836	264
		L V RIGBY	4341	836	264
		G C SHELTON	4346	836	264
		A D SWAIN	3675	836	264
		R G WEBSTER	3802	836	264
	RELIABILITY ENGINEERS	C H GODDARD	4346	836	264
		P A LONGMIRE	2903	836	264
		G T MERREN	5647	836	264
		R E SMITH	3706	836	264
		W M SUNDT	3706	836	264
1643	STATISTICS + COMPUTING DIVISION				
		R K PRAIRIE /12/	5758	836	270
	SEC MRS S C HOPKINS		3877	836	270
	STATISTICIANS	C R CLARK	2704	836	270
		R C EASTERLING	8834	836	270
		D A EDELMAN	5133	836	270
		I J HALL	8834	836	270
		G J LOMBARDI	3701	836	270
		W H ROBERTSON	2704	836	270
		D D SHELDON	4749	836	270
	COMPUTER GROUP	H E ANDERSON	5133	836	270
		MISS E L FROST	1358	836	272
		MRS M S HILL	1358	836	272
		MRS A M SMITH	1358	836	272
1650	**NUCLEAR SAFETY DEPARTMENT**				
		W L STEVENS /13/ 264-	4203	836	146
	SEC MRS E G MANZANARES		6779	836	146
1651	SYSTEMS SAFETY STUDIES DIVISION				
		P F JONES /5/	3336	836	214
	SEC MRS G LYDIC		1330	836	214
		J J DISHUCK	4476	836	214
		R P LAMBERT	1704	836	214
		D R LEWIS	7146	836	214
		R E REED	1703	836	214
1652	SAFETY ASSURANCE STUDIES DIVISION				
		S D SPRAY /6/	3135	836	146
	SEC E G MANZANARES		6779	836	146
		A M FINE	3438	836	146
		J W GREAR JR	1704	836	146
		J W HICKMAN	1704	836	146
		J D MCCLURE	3438	836	146
		G R NORRIS	2850	836	146

Accidents



Palomares, 1966

Standards (Walske Criteria)

- Carl Walske, MLC, to BG Edward B. Giller, AEC/DMA, "Standards for Warhead and Bomb Premature Probability MC Paragraphs," 14 March 1968
  - Bomb MCs

a. The probability of a premature nuclear detonation of a bomb due to bomb component malfunctions, in the absence of any input signals except for specified signals (e.g. monitoring and control), shall not exceed:

   1) Prior to receipt of the pre-arm signal, for normal* storage and operational environments described in the STS, 1 in 10^9 per bomb lifetime.

   2) Prior to receipt of the pre-arm signal, for the abnormal** environments described in the STS, 1 in 10^6 per bomb exposure or accident.

b. The probability of a premature nuclear detonation of a bomb due to bomb component malfunctions, after the receipt of the pre-arm signal, which will endanger the deliver aircraft shall not exceed 1 in 10^3. (Other detailed criteria for this operational environment depend upon the specific bomb and its method of employment and therefore must be evaluated for the military characteristics for that particular weapon.)

Definitions

- *Normal environments are those expected logistical and operational environments, as defined in the weapon's stockpile-to-target sequence and military characteristics in which the weapon is required to survive without degradation in operational reliability.
- **Abnormal environments are those environments as defined in the weapon's stockpile-to-target sequence and military characteristics in which the weapon is not expected to retain full operational reliability.

The Management

Jack Howard

Bill Stevens

Stan Spray

Nuclear Safety Department

07/1968

ORG	TITLE	NAME	PHONE	BLDG	RM
1650	NUCLEAR SAFETY DEPARTMENT				
		W L STEVENS /8/	264- 4203	836	146
		SEC MRS E G MANZANARES	6779	836	146
1651	SYSTEMS SAFETY STUDIES DIVISION				
		P F JONES /6/	3336	836	214
		SEC MRS G LYDIC	1330	836	214
		J J DISHUCK	4476	836	214
		J W HICKMAN	1704	836	214
		R P LAMBERT	1704	836	214
		D R LEWIS	7146	836	214
		R E REED	1703	836	214

11/1968

ORG	TITLE	NAME	PHONE	BLDG	RM
1650	NUCLEAR SAFETY DEPARTMENT				
		W L STEVENS /9/	264- 4203	836	146
		SEC MRS E G MANZANARES	6779	836	146
1651	SYSTEMS SAFETY STUDIES DIVISION				
		P F JONES /6/	3336	836	214
		SEC MRS G LYDIC	1330	836	214
		J J DISHUCK	4476	836	214
		J W HICKMAN	1704	836	214
		R P LAMBERT	1704	836	214
		D R LEWIS	7146	836	214
		R E REED	1703	836	214
1652	SAFETY ASSURANCE STUDIES DIVISION				
		SEC		836	
				836	
		A M FINE	7348	836	178

01/1969

1652 Safety Assurance Studies Division

S. D. Spray	3135
A. M. Fine	3438
J. W. Grear, Jr.	2460
J. W. Hickman	1704
J. D. McClure	3438
G. R. Norris	2850