

Interim Readiness Plan

F. D. Seward

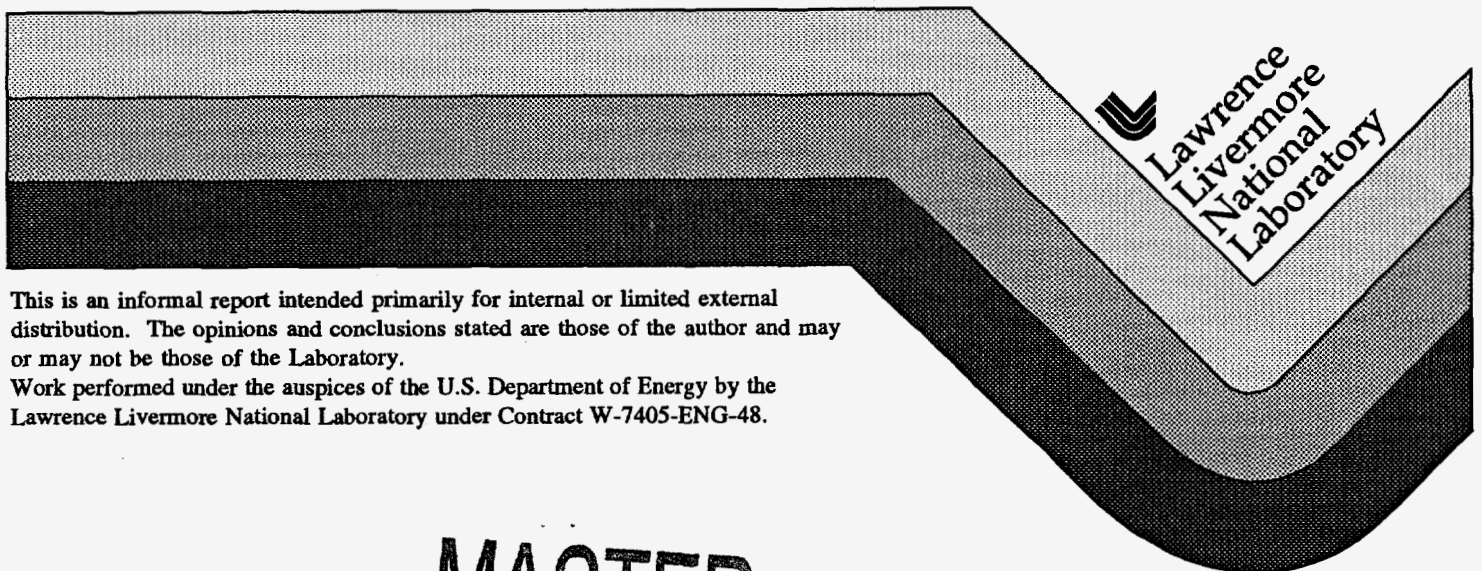
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March 7, 1969



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7 March 1969

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TO: F.C. Gilbert/Distribution
FROM: F.D. Seward - X-7971, L-46

SUBJECT: INTERIM READINESS PLAN

~~TOP SECRET~~
1904

Attached are rough designs and costs for 3 payloads which can be built, starting right now, on a relatively fast time scale. With these, LRL could measure neutrons and X-rays from high altitude shots as shown on the attached schedule. Note that we would make no measurements of soft X-rays ($h\nu \lesssim 5$ keV), hard X-rays ($h\nu \gtrsim 60$ keV), or γ -rays. We would plan to fly the Simplex payload as part of the spring Lapwing exercise.

Some interim capability exists from other sources which might complement the above measurements. Sandia has developed a mylar sail sampler which could be used for debris experiments. There is a LASL/Sandia scan converter which could be fielded to make fast time-history measurements of the X-ray or γ -ray pulse. Interval time could be measured with a ground based EMP detector.

[REDACTED]

[REDACTED]

The LRL cost of this interim rocket program is ~5 man years of effort-and about \$140,000 of major procurement. Sandia would need ~\$450,000 to stockpile payloads. I believe the necessary rockets are already stockpiled but some work on the ranges might be required. For example, more launchers are needed on Johnston Atoll. All this money and effort would be expended in FY-1970 and these rocket experiments would be ready ("on the shelf" or close) by June 1970.

FDS:dj

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COST OF INTERIM ROCKET READINESS

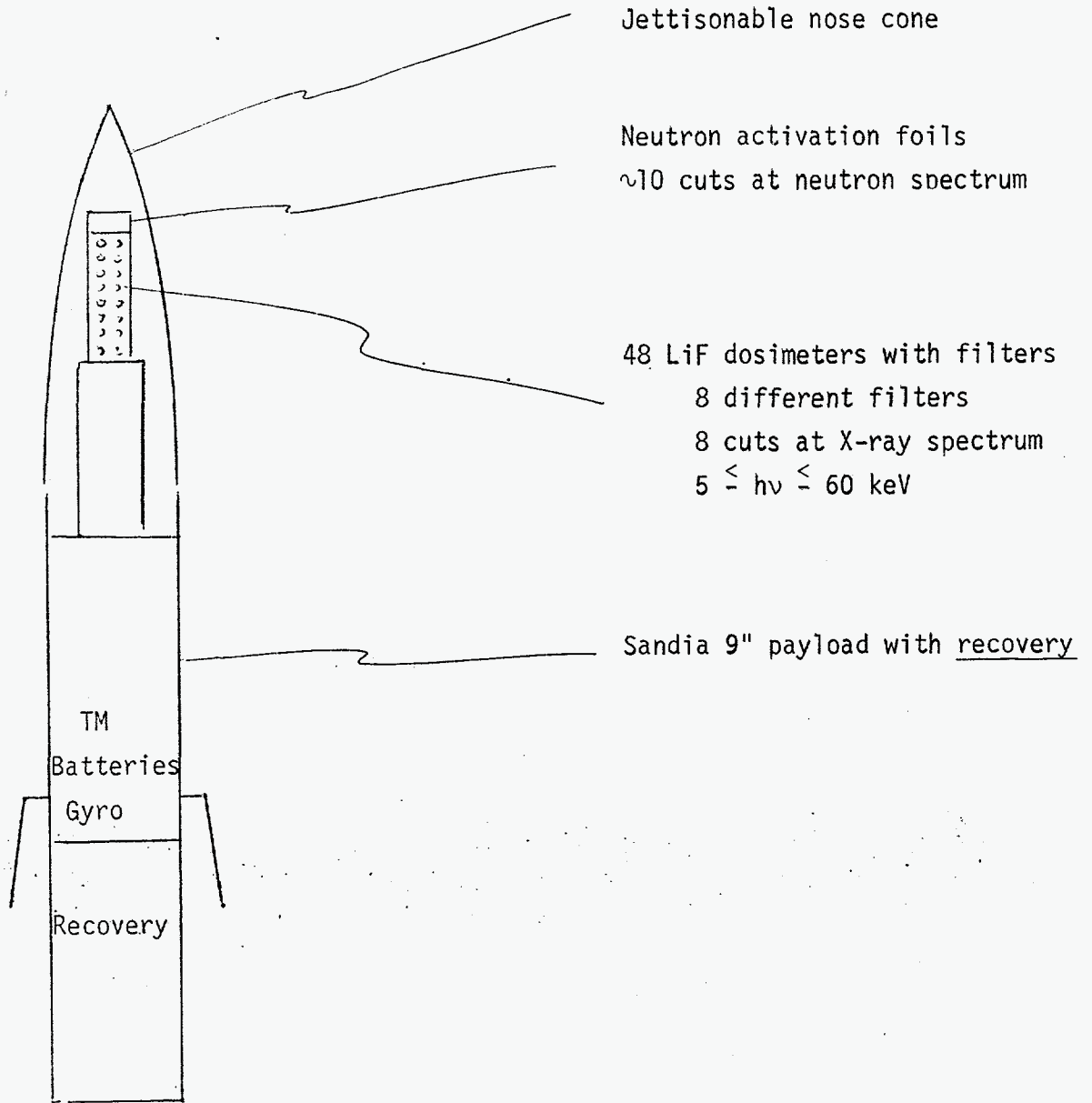
PAYLOAD	PARTS	TOTAL EFFORT	COST/UNIT	# OF UNITS NEEDED	TOTAL COST	TOTAL EFFORT		
						Mech.	Sci.	Elec.
SIMPLEX	Design	3 mm Eng						
	LiF dosimeter							
	Absorbers	1 mm	10 K	}	9	13	7	2
	Mech. Syst.		3 K					
Neut. dosimeter								
Calibration	6 mm Sci							
Assembly	8 mm MT							
9" Payload		Sandia	27 K	9	243			
Flight test		3 mm						
NEUTRON	Design	3 mm Eng						
	Front end							
	Sens. Neut. Det.		1 K	}	3	9	6	12
	Insen. Neut. Det.		1 K					
	14 Mev Neutron		3 K					
	Delayed γ		.5 K					
	Electronics		.5 K					
Assembly	12 mm	4 K						
Calibration	6 mm MT							
12" Payload	6 mm Sci							
		Sandia	27 K	3	81			
XTALEX	Design	3 mm Eng						
	Front end							
	Assembly	3 mm MT	2 K	3	6	6	12	1
	Calibration	12 mm Sci						
12" ACS Payload		Sandia	37 K	3	111			
					588	28	25	15

LRL = 153 K
 (Major Procurement) = 139 K
 Sandia = 435 K

68 Man Months

[REDACTED]

SIMPLEX

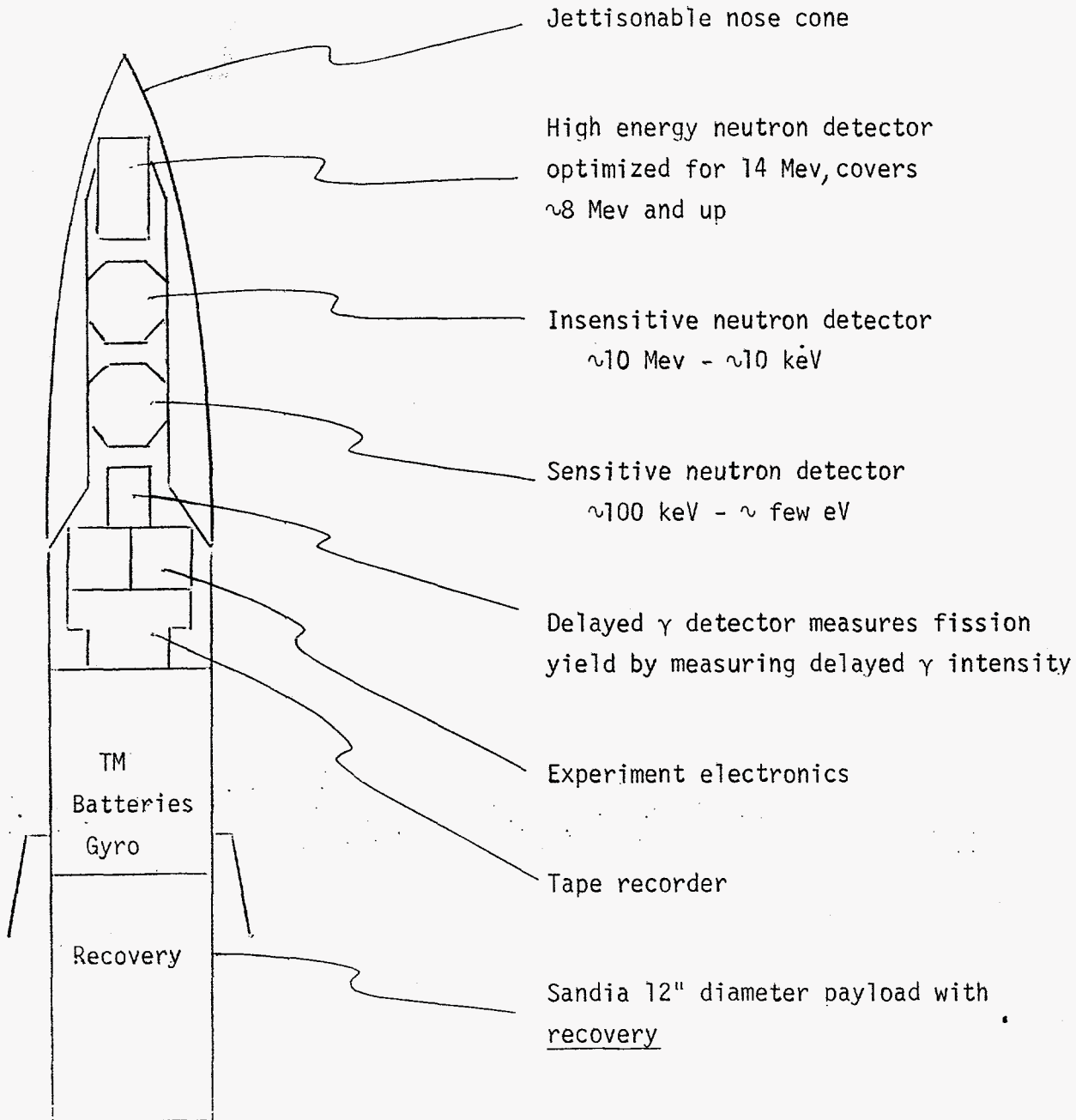


Launch Vehicle
Nike Tomahawk
or
Terrier Tomahawk

[REDACTED]

[REDACTED]

NEUTRON



Launch Vehicle

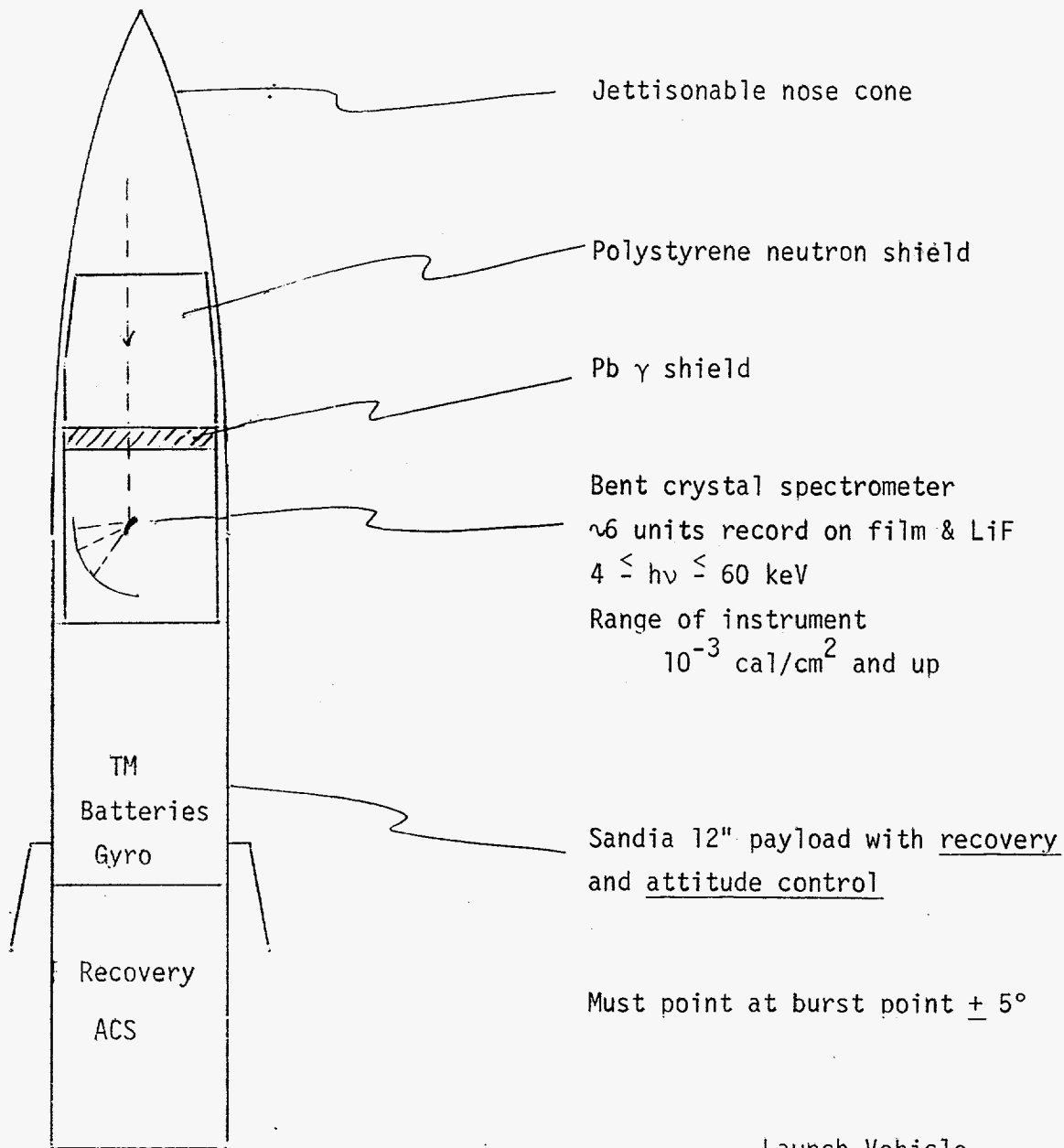
Nike Tomahawk

or

Sandhawk

[REDACTED]

XTALEX



Launch Vehicle

Nike Tomahawk

or

Sandhawk

SCHEDULE

		<u>SIMPLEX</u>	<u>XTALEX</u>	<u>NEUTRON</u>
GO + 3 months	Calib.	2 - J.A.	1 - J.A.	1 - Kauai
GO + 6 months	Spartan	7 - J.A.	2 - Kauai	2 - Kauai
GO + 6.5 months	?)	Use Recovered Experiments		
GO + 7 months	?)			

There is a high probability that all payloads will be recovered in good shape. They can be reused for subsequent shots with little extra effort and on a fairly rapid time scale.