



LAWRENCE  
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# 661N1 and 661N3 Pre Shot Report

S. T. Bosson

April 14, 2004

## **Disclaimer**

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## B-DIVISION/SITE 300 EXPLOSIVES ACTIVITY PEER REVIEW

**Shot Number:** 661N1 and 661N3

**Ramrod:** Bosson

**Bunker:** 851

**Estimated firing date:** May 4, 2004

**Short description of any unusual circumstances and hazards:**

### Attention Ramrod/Experimenter!

For every explosives experiment to be conducted at the B-Division facilities at Site 300, you are to complete this portion and submit this form along with the following supporting documentation to Peer Reviewers for a safety assessment:

- 1) The completed Shot Material Database Input form (latest revision);
- 2) The Assembly Request (may be a copy of the original);
- 3) The completed pre-shot (except for those aspects ordinarily subject to late change). Muster/Fragment analyses, if required, are to be included with the pre-shot. Note that changes to the pre-shot that adversely affect safety will require another peer review.
- 4) A copy of each OSP and/or IWS that has been approved specifically for this experiment

### Reviewers:

Signatures of **at least** two peer reviewers are required, with at least one of them from the list of B/S300-approved peer reviewers. The current list is maintained by the B-Division/Site 300 Facility Manager, with copies retained at each bunker.

**As a Peer Reviewer, I have assessed the need for additional ES&H controls beyond those defined in the ES&H Manual ([http://www-r.llnl.gov/es\\_and\\_h/esh-manual.html](http://www-r.llnl.gov/es_and_h/esh-manual.html)), the B Division/Site 300 FSP S300.1 (latest revision), and currently active OSPs/IWSs for activities performed at the proposed firing site. A new OSP/IWS will be required to conduct this experiment if the ES&H controls described in the accompanying pre-shot documentation are not considered adequate to meet the minimum requirements of the LLNL Health and Safety Manual, the B Division/Site 300 FSP S300.1 (latest revision), and/or currently active OSPs/IWSs for activities performed at the proposed firing site.**

1) Based on my assessment, I have determined that additional safety controls **ARE / ARE NOT** (circle one) required for this experiment.

Peer Reviewer's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(blue ink ONLY, please)

2) Based on my assessment, I have determined that additional safety controls **ARE / ARE NOT** (circle one) required for this experiment.

Peer Reviewer's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(blue ink ONLY, please)

3) Based on my assessment, I have determined that additional safety controls **ARE / ARE NOT** (circle one) required for this experiment.

Peer Reviewer's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(blue ink ONLY, please)





# SCHEDULING REQUEST

**Shot Number: 661N1 and 661N3**

**Ramrod: Bosson**

**Phone: 4-3096**

**Account Number: 501222**

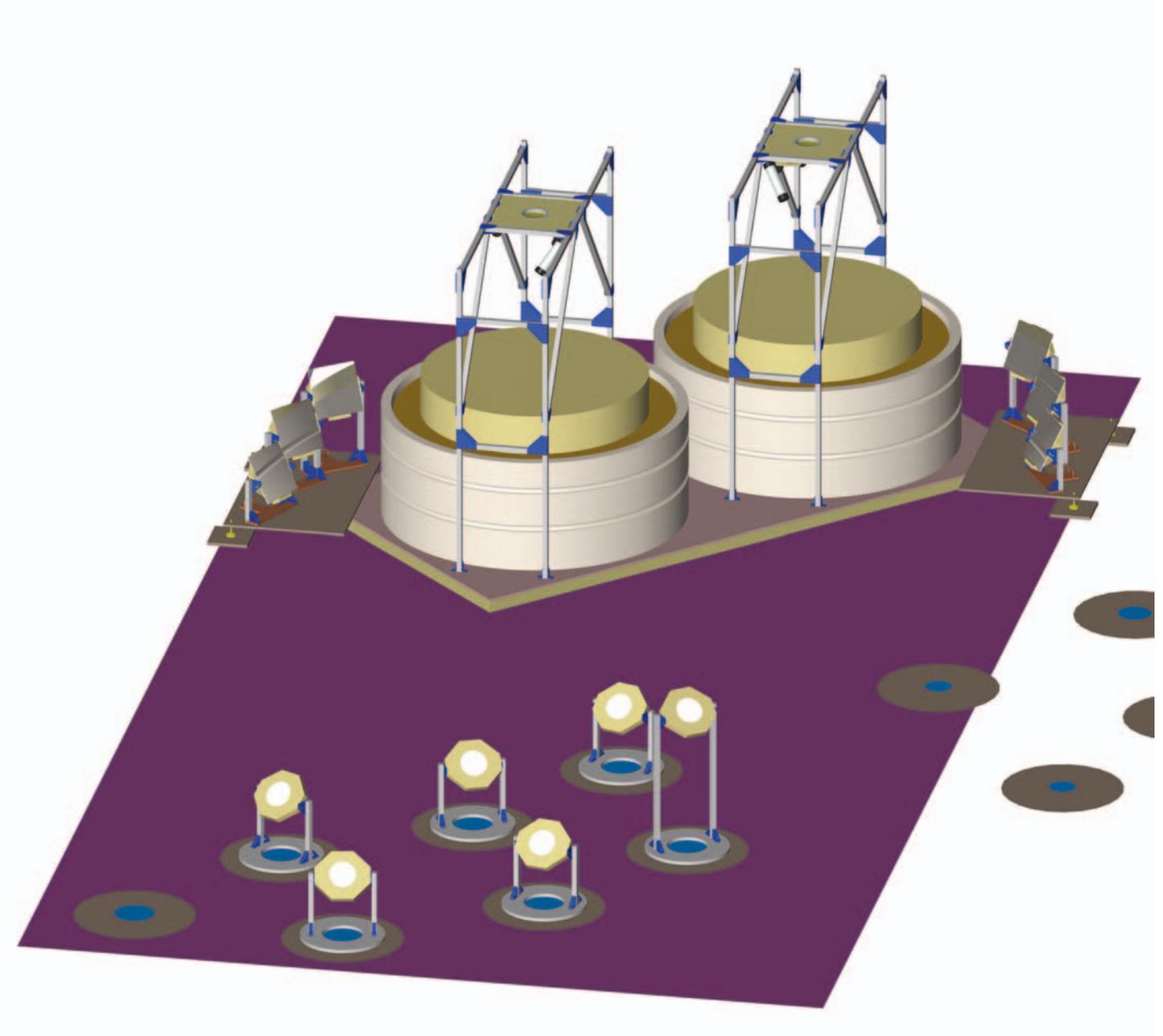
Firing Facility : 851		Start Date (estimated) : April 27, 2004		Reference Shot:661R1	
Estimated Time Required for Set Up: 1 week			Estimated Time Required for Clean Up: 3 days		
Principal Investigator: Greg Archbold			L- 016		Phone: 4-4495
Primary Engineer: Bryan Nathan			L- 125		Phone: 2-7506
Classification	Visual	<input type="checkbox"/> Proprietary	<input type="checkbox"/> SRD	<input type="checkbox"/> CRD	<input checked="" type="checkbox"/> UNC
	X-Ray View	<input type="checkbox"/> Proprietary	<input type="checkbox"/> SRD	<input type="checkbox"/> CRD	<input checked="" type="checkbox"/> UNC
	Digital Data	<input type="checkbox"/> Proprietary	<input type="checkbox"/> SRD	<input type="checkbox"/> CRD	<input checked="" type="checkbox"/> UNC
HE Weight <	4.1 lbs	Muster Type: Modified Local		Muster Radius: 1500'	
Toxic Materials	<input checked="" type="checkbox"/> U6Nb/D-38	<input type="checkbox"/> Be	<input type="checkbox"/> LiH	<input type="checkbox"/> Other	
Special OSPs required:					

## RESOURCE REQUIREMENTS

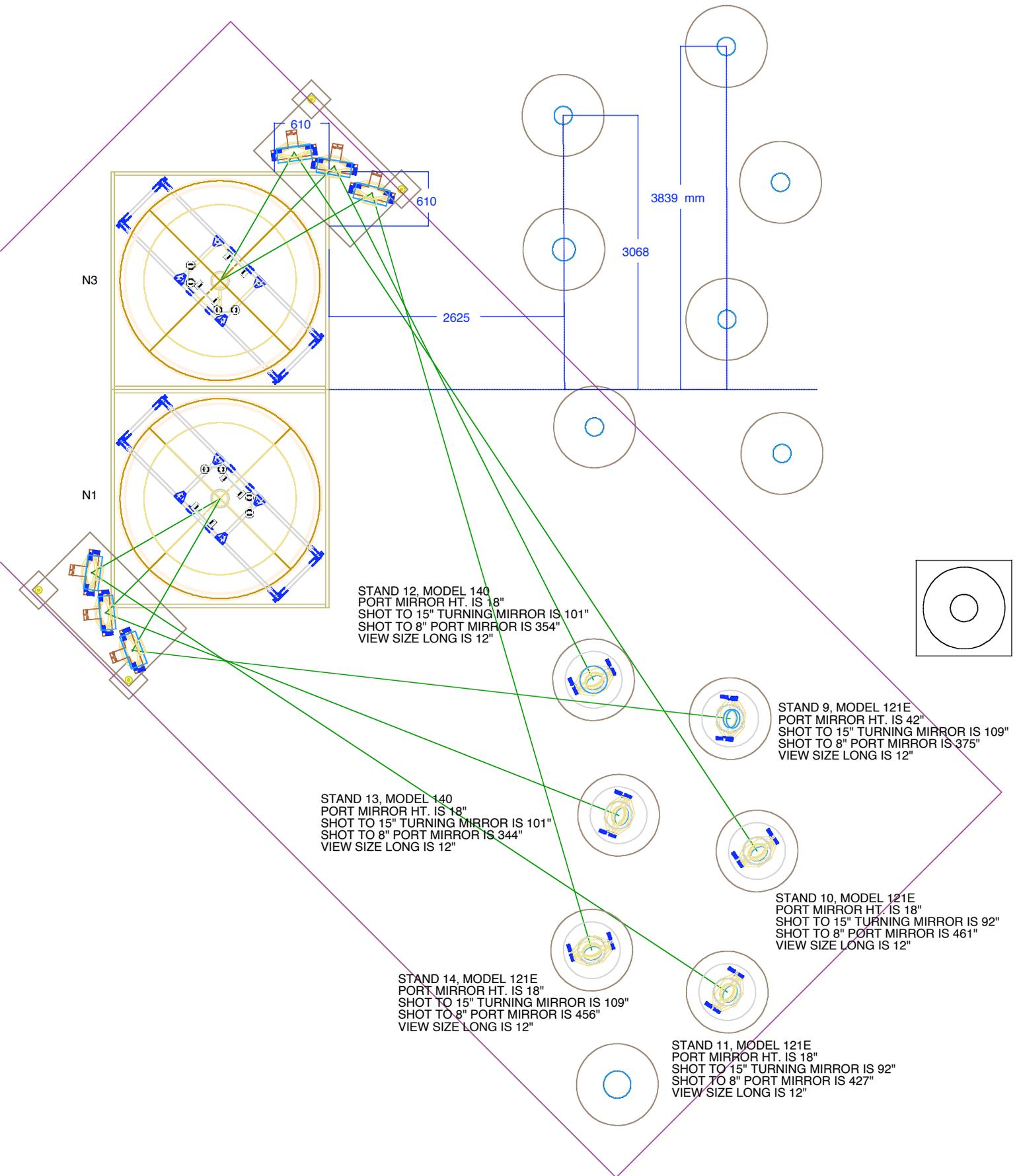
<input type="checkbox"/> AS	Auxiliary Systems					
<input type="checkbox"/> C	Candles (Argon)	Qty: 0 Small		Qty: 0 Large		
<input type="checkbox"/> CT	Cold Trap					
<input checked="" type="checkbox"/> D	Digitizers	Total Channels: 11+				
<input checked="" type="checkbox"/> FL	Flashlamps Both Banks					
<input type="checkbox"/> FS	Remote Fireset	Type:	Voltage:		V	
<input type="checkbox"/> GR	Gamma Ray Camera					
<input type="checkbox"/> HC	Hycam					
<input type="checkbox"/> I-	Fabry Perot Velocimetry	Probes:		Cameras:		
<input type="checkbox"/> IC	IC Camera					
<input type="checkbox"/> IR	IR Temperature Probe / Pyrometer					
<input type="checkbox"/> LF	LED / Laser FID					
<input type="checkbox"/> M	Vacuum/ MUMA System					
<input checked="" type="checkbox"/> O	Optics (Stand/ Model)	9/ 121-E	10/ 121-E	11/ 121-E	12/ 140	13/ 140 14/ 140
<input type="checkbox"/> P	Pins					
<input type="checkbox"/> PT	Pressure Transducer Preamplifier(s)	Qty:				
<input checked="" type="checkbox"/> R	Recovery Water Tanks					
<input type="checkbox"/> RA	Ransco , Shot Thermal Conditioning (includes temperature monitoring)				<input type="checkbox"/> Hot	<input type="checkbox"/> Cold
<input type="checkbox"/> SG	Strain Gauge Preamplifier(s)	Qty:				
<input type="checkbox"/> T	Thermocouple Preamplifier(s)	Qty:				
<input checked="" type="checkbox"/> TE	Tent	Size: 20'x40'		<input checked="" type="checkbox"/> Black?		
<input checked="" type="checkbox"/> V	Video					
<input type="checkbox"/> XF	X-Ray, FXR					
<input type="checkbox"/> XL	X-Ray, LINAC					
<input type="checkbox"/> XP	X-Ray, 450 HP / PI					
<input type="checkbox"/> XS	X-Ray, 450 Scandiflash					
<input type="checkbox"/> XO	X-Ray, Orthogonal					
<input checked="" type="checkbox"/> Other	1 PDV Probe					

Date Fired :        /        /	Time Fired:        :        AM / PM	Temperature:        ° F or C
Bunker Supervisor:		
Console Operator:		

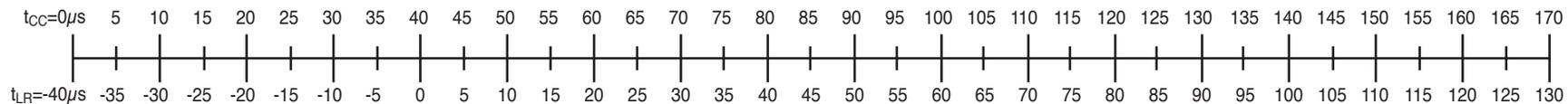
661N1 and 661N3 Table Layout



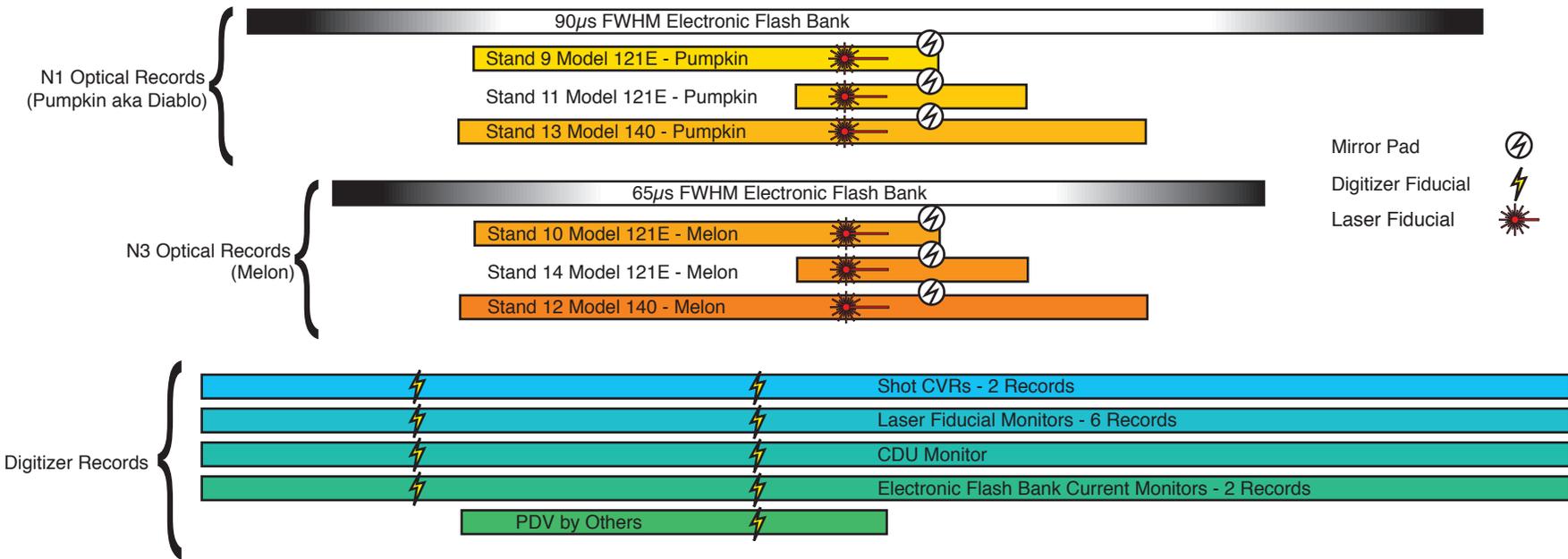
661N1 and N3 Table Layout



# 661N1 and N3 Timing Chart

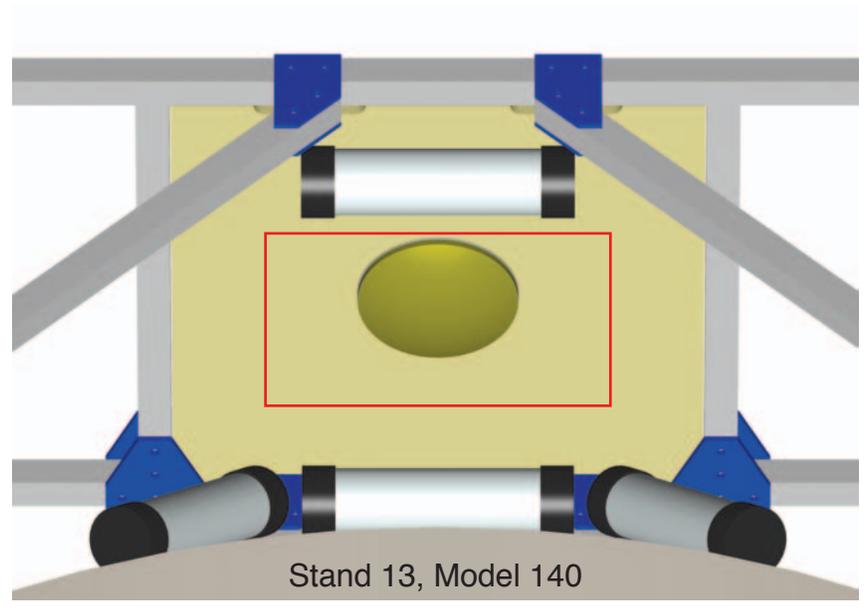
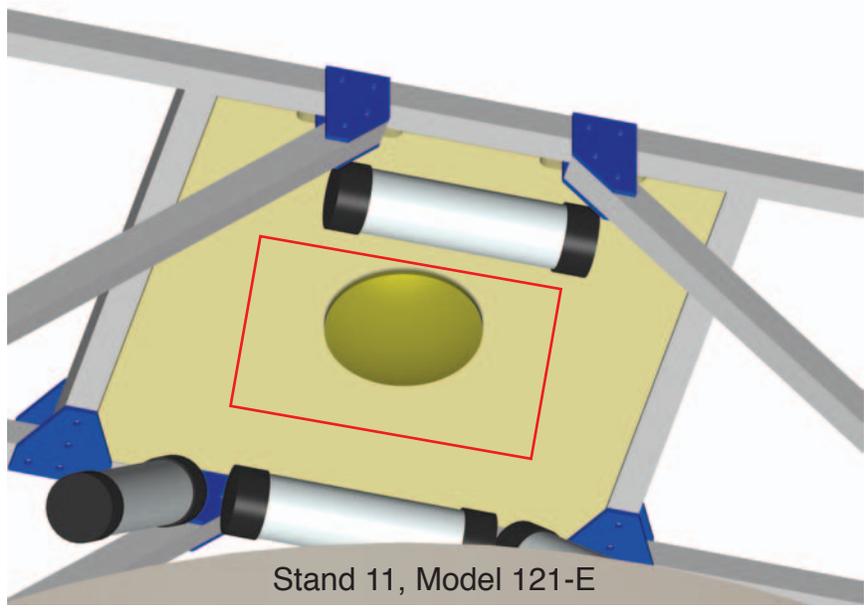
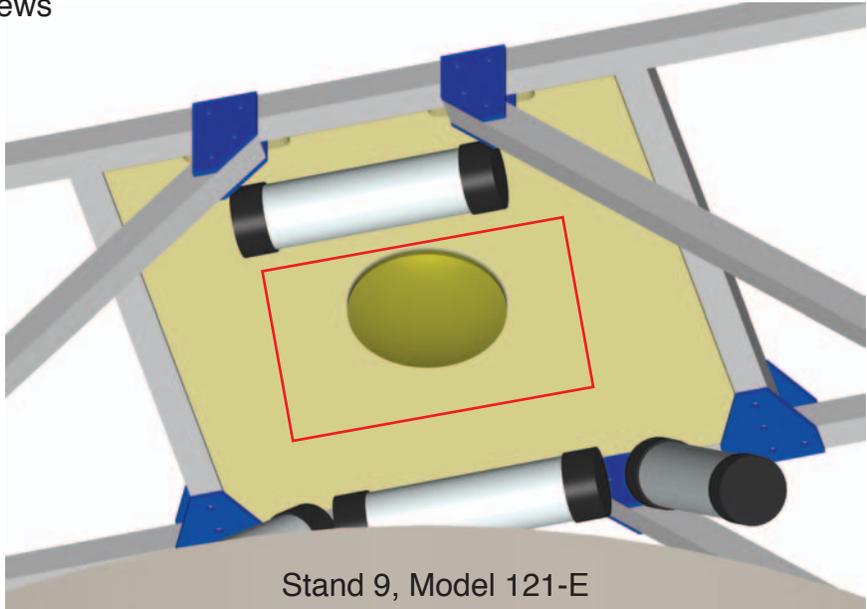


N3 PDV Trigger

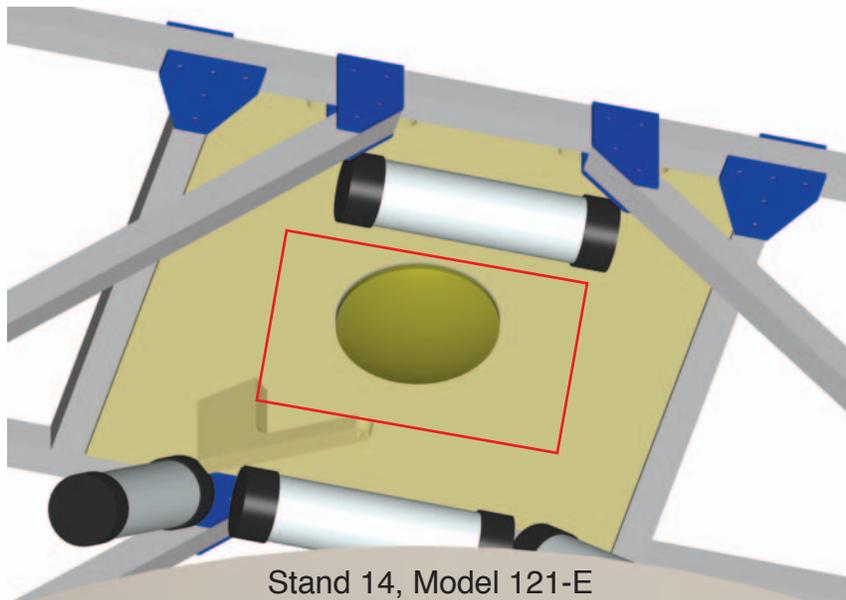
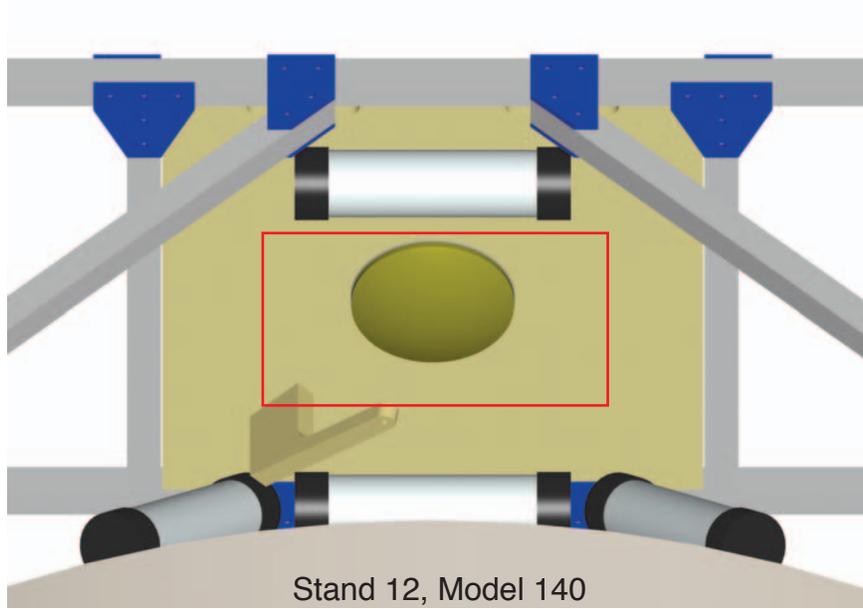
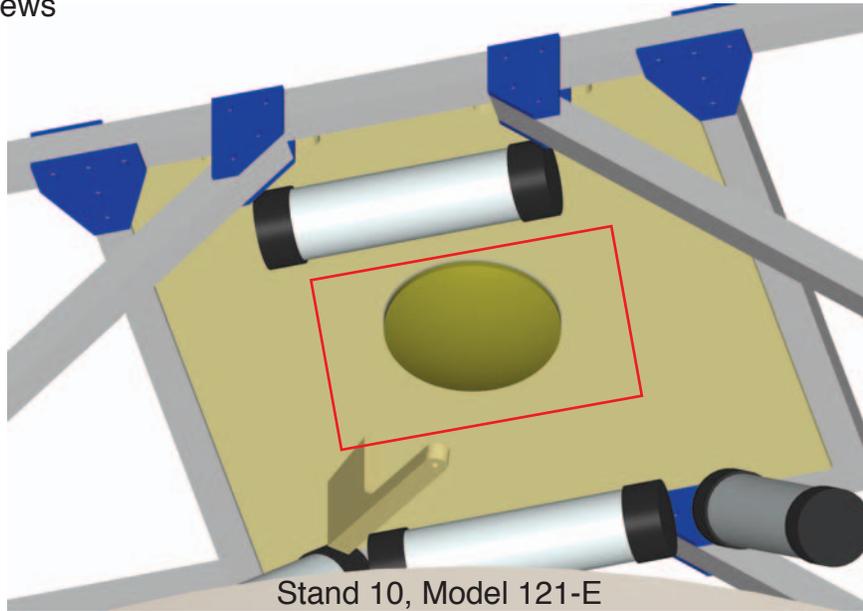




661N1 Camera Views



661N3 Camera Views



# REQUIRED MATERIALS

**Shot Number:** 661N1 and 661N3

**Ramrod:** Bosson

**Phone:** 4-3096

**Account Number:** 501222

Table	Qty.
8' x 8' Barn Door	2

Port Glass	Qty.
8 " Ø	6
10 " Ø	
12 " Ø	

Port Mirrors	Qty.
8 " Ø	6
10 " Ø	
12 " Ø	

Other Mirrors	Qty.
15" x 15" x 1/4"	6

Candle Supports	Qty.
Stand (     )	
Stand (     )	
Shelf (     )	
Shelf (     )	

Candles	Qty.

Flash Lamps	Qty.
MegaSun	<input type="checkbox"/>
Flashbank One	1
Flashbank Two	1
Lamps	8

Tents	Qty.
20' x 40'	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

Targets	Qty.

Target Holders	Qty.

CDU	Qty.
Protection	<input type="checkbox"/>
Type	

Signal Cables	Qty.
Light meter	2

Detonator Cables	Qty.
31C/PT (90')	8
31C/31C (Length?)	

Miscellany	Qty.
Water tank	2
80/20 shot frame	2
per drawing	
3' x 5' steel plate	2
per drawing	
T mirror base	6
per drawing	
O mirror base	6
Foam quarter	
circles per drawing	
small, 5 pound	24
large, 10 pound	4
large, 20 pound	8
Light Meters	2
PDV probe holder	1
BWs for dryrun	