

2014 Rhythm & Booms Report to the City of Madison

Event: Rhythm & Booms
 Sponsor: Madison Festivals, Inc.
 Pyrotechnic Operator: J&M Displays, 18064 170th Ave, Yarmouth IA
 Federal Explosives License/Permit number 5-IA-057-50-5K-00054
 expiration date October 1, 2015
 Date of show: 28-Jun-14
 Time of show: 9:30:00 PM CST
 Duration: 26 minutes 28 seconds 27 milliseconds
 Location: Lake Monona, between Olin boat launch and John Nolen Dr
 Net Explosive Weight: 2,812.5 pounds
 Number of Shells: 4,732

Type of Shells:	Diameter	Number	Shell count
Multi-shell barrage units	0.75	10	1000
	1.2	30	1335
	2	5	160
			2,495
Shells	1.5		240
	3		277
	4		277
	5		767
	6		430
	8		156
	10		50
			2197
Finales	4	5	40
TOTAL			4732

PROVIDED TO CITY OF MADISON FIRE DEPARTMENT:

Emergency Response Information for 1.3 G Display Fireworks
 Material Safety Data Sheets
 Safety Plan
 Show Script by Time with shell sizes and positions
 Show Script by Address with shell sizes and positions
 Overall site diagram
 Racks layout for each of 12 positions

Firework Colorants

Color	Compound
Red	strontium salts, lithium salts lithium carbonate, Li_2CO_3 = red strontium carbonate, SrCO_3 = bright red
Orange	calcium salts calcium chloride, CaCl_2 calcium sulfate, $\text{CaSO}_4 \cdot x\text{H}_2\text{O}$, where $x = 0, 2, 3, 5$
Gold	incandescence of iron (with carbon), charcoal, or lampblack
Yellow	sodium compounds sodium nitrate, NaNO_3 cryolite, Na_3AlF_6
Electric White	white-hot metal, such as magnesium or aluminum barium oxide, BaO
Green	barium compounds + chlorine producer barium chloride, BaCl_2 = bright green
Blue	copper compounds + chlorine producer copper acetoarsenite (Paris Green), $\text{Cu}_3\text{As}_2\text{O}_3\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$ = blue copper (I) chloride, CuCl = turquoise blue
Purple	mixture of strontium (red) and copper (blue) compounds
Silver	burning aluminum, titanium, or magnesium powder or flakes

Madison Festivals completed the Clean-up Plan for John Nolen Dr by 3 am 6/29/14

Madison Festivals completed the Clean-up Plan for Law Park/Lake Monona shore by 11 am 6/29/14

Madison Festivals had all buoys off Lake Monona by 5 pm 6/29/14

Madison Festivals reopened John Nolen Dr 7:15 am 6/29/14 (scheduled 8 am inbound; 10 am outbound)

Madison Festivals reopened Olin Boat Launch on July 2 (24 hours ahead of schedule)

Note: It was also open Friday, June 20

Monitoring Post Event: Parks Superintendent responsible for Olin boat launch, and the shoreline of Olin Park and Law Park
City Engineer responsible for Lake Monona (within 2,640 feet of the firing location and within 1,000 feet of the Olin Boat Launch
Madison Festivals received no written or verbal reports from either the Parks Superintendent or the City Engineer of the dates, times or visual monitoring observations.

Submitted 7/17/14 by Rita Kelliher, MFI President, to Parks Superintendent, City Engineer, Legal
rita@madisonfestivals.com 608-310-7294