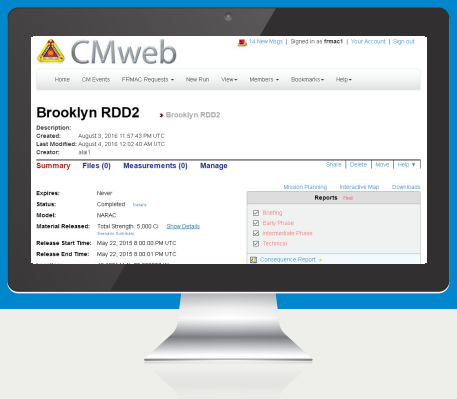
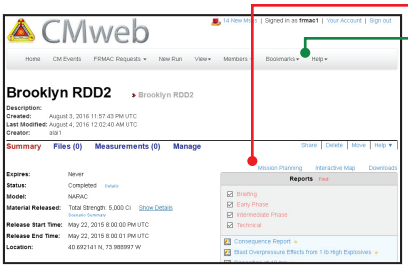
Mission Planning Job Aid

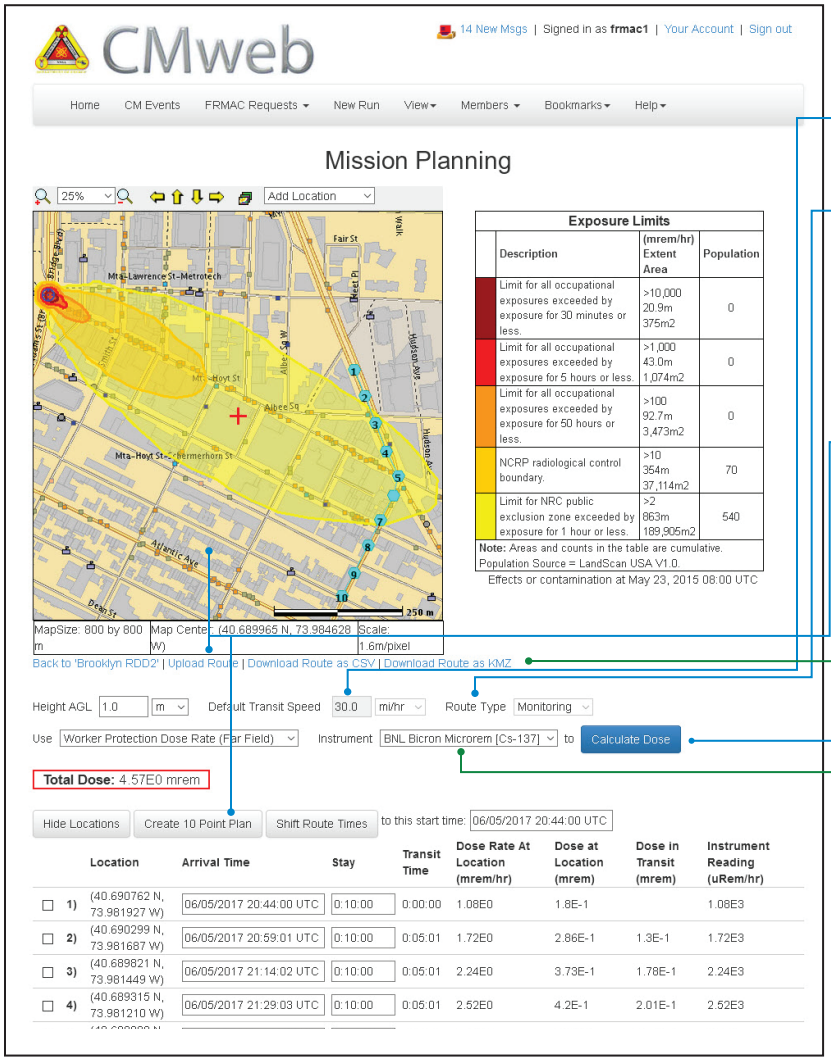
CMweb



CMweb URL: https://cmweb.llnl.gov
NARAC Exercise/Emergency: (925) 424-6465
NARAC Customer Support : (925) 422-9159
CMHT: 702-734-1665
Advisory Team: 866-300-4374

Access to runs in the NARAC folder may need to be requested from CMHT or NARAC Customer Support.

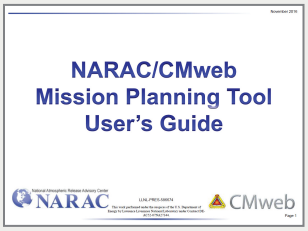




Mission Planning Tool

For any NARAC run that contains a dose rate prediction, the Mission Planning Tool allows the user to calculate the dose received due to a monitoring or evacuation strategy.

Mission Planning User Guide under Help



1 Step 1

Select Transit Speed – default 30m/hr

2 Step 2

Select Route Type – Monitoring or Evacuation

Stay time = 0 for Evacuation

- Once a route is initiated on the map or uploaded, Transit Speed and Route Type cannot be changed

3 Step 3

Select a route from 3 options

- Clicking a location on map
- Uploading .csv route
- Create 10 Point Plan

4 Step 4

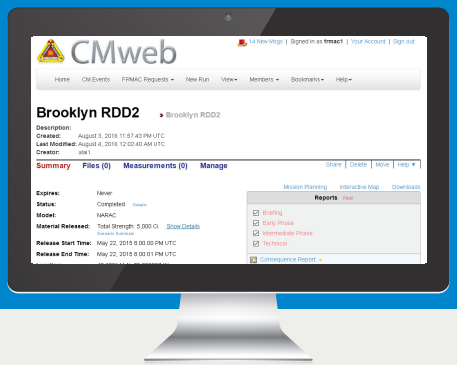
Calculate Dose

1 Additional Options

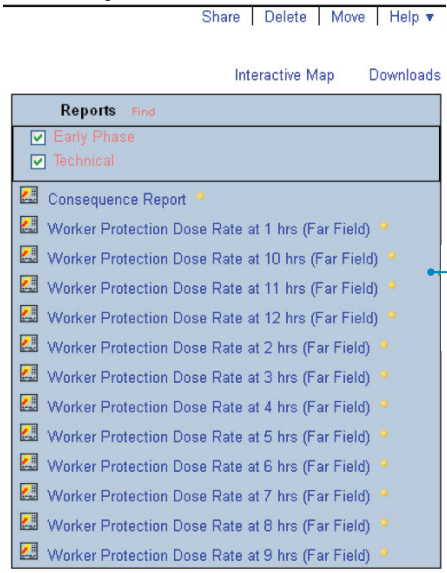
- Download route as .csv or .kml
- Range of instruments available to provide mock instrument readings

Mission Planning Job Aid

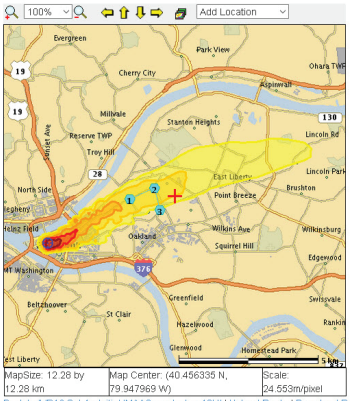
CMweb



Multiple Does Rate Plot



Nuclear Detonation



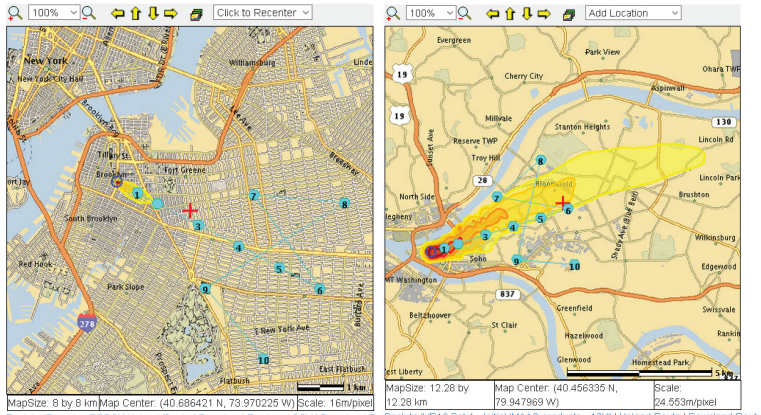
Back to 'VR16 Set 1 - Initial IMAAC products - 10kt' | Upload Route | Download Route as CSV | Download Route as KMZ

Exposure Limits			
	Description	(rem/hr) Extent Area	Population
	Four times PAG for lifesaving and protection of large populations exceeded by exposure for 1 hour or less.	>100 0.5km 0.1km2	0
	Twice PAG for lifesaving and protection of large populations exceeded by exposure for 1 hour or less.	>50 1.2km 0.4km2	0
	PAG for lifesaving and protection of large populations exceeded by exposure for 1 hour or less.	>25 2.9km 1.2km2	1,700
	PAG for protection of major property needed for public welfare exceeded by exposure for 1 hour or less.	>10 5.6km 4.4km2	11,900
	Limit for all occupational exposures exceeded by exposure for 1 hour or less.	>5 10.1km 12.4km2	38,300

Note: Areas and counts in the table are cumulative.
Population Source = LandScan2010.

Effects or contamination at May 02, 2016 03:00 UTC

Using 10 Point Plan to Create Route



Back to 'Brooklyn RDD2' | Upload Route | Download Route as CSV | Download R

Back to 'VR16 Set 1 - Initial IMAAC products - 10kt' | Upload Route | Download Routi

Multiple Dose Rate Plots

When there are multiple plots for different times associated with a specific dose rate plot type, NARAC software will look at the Mission Planning Arrival Times and choose the most applicable prediction time(s). If multiple plot times are spanned , it will interpolate.

Example:

NARAC predictions available at hourly intervals. Software will automatically choose which prediction times most closely match the arrival times.

Changing Dose Rate with Time for Nuclear Detonation

For Nuclear Detonation predictions, multiple dose rate plots are not needed. A power law decay function is used for time variation of ground shine dose rate from fission products.

WARNING
Verify Start Time is desired time.
Use Shift Route Times to adjust, if needed.

Using 10 Point Plan to Create Route

The 10 Point Plan uses a standard algorithm that does not take into account street patterns or accessibility to a location in determining the route locations. Adjustments to the route may need to be made.

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