# CAL Guard Fuel Running Estimate 

MAJ Michael S. Riley

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Situation: An 7.8 magnitude earthquake has hit the San Francisco Bay Area. Task: Estimate fuel consumption for each of the first 10 days of the response.

## Assumptions:

- Deployment of the entire CANG.
- Units are grouped by population center and drive uniform distances while deploying.
- Units will deploy directly to the staging area.
- Organizations are running 24 hr ops.
- All Military vehicles get the same MPG which is a weighted average of the fuel efficiency of our rolling stock on deployment / redeployment days.
- Long haul vehicles will adhere to 150 mile rule.
- $7 \%$ of the vehicles will roll on Day 1 for ADVON.
- GSA fuel economy is based on the following:
- SUV's are all Jeep Patriot's.
- Sedan's are all Chevy Malibu's.
- Minivan's are Dodge Caravan's.
- 15 PAX Van's are GMC Savana 1500.
- Trucks are Dodge Ram 1500.
- Only GSA's from G4 and the HRF will be used, all others belong to units like Grizzly/Challenge or Counter Drug that will not mobilize for DSCA.
- Airframes are flying for 8 hours a day of actual flight time.
- F15's will fly 2 birds (CAP Mission) at a time 24 hours a day for 6 total per day
- Day 1 will only have ISR in the air, five H-60's, and the F15's.
- The exception is the C-12 for VIP / Liaison transport that we assume would only fly 5 hours per day.

Mo Gas


| Mo Gas | Gallons |
| :--- | ---: |
| Day 1 | 586 |
| Day 2 | 3,894 |
| Day 3 | 3,894 |
| Day 4 | 2,966 |
| Day 5 | 2,966 |
| Day 6 | 2,966 |
| Day 7 | 2,966 |
| Day 8 | 2,966 |
| Day 9 | 2,966 |
| Day 10 | 2,966 |

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## Fuel Consumption of JP8

JP8


|  | JP8 |
| :--- | ---: |
| Day 1 | Gallons |
| Day 2 | 41,412 |
| Day 3 | 275,093 |
| Day 4 | 275,093 |
| Day 5 | 227,370 |
| Day 6 | 227,370 |
| Day 7 | 227,370 |
| Day 8 | 227,370 |
| Day 9 | 227,370 |
| Day 10 | 227,370 |

## UNCLASSIFIED <br> Fuel Consumption of JET A



Day 1 Summary in gallons

Day 1

| Mo Gas | 586 |
| :--- | ---: |
| JP8 | 41,412 |
| JET A | 51,528 |

Day 2-3 Summary in Gallons

| Day 2 |  | Day 3 |  |
| :--- | ---: | :--- | ---: |
| Mo Gas | 3,894 | Mo Gas | 3,894 |
| JP8 | 275,093 | JP8 | 275,093 |
| JET A | 197,072 | JET A | 197,072 |

## Day 4-10 Summary in Gallons

| Day 4 |  | Day 5 |  | Day 6 |  | Day 7 |  |
| :--- | ---: | :--- | ---: | :--- | :--- | :--- | ---: |
| Mo Gas | 2,966 | Mo Gas | 2,966 | Mo Gas | 2,966 | Mo Gas | 2,966 |
| JP8 | 227,370 | JP8 | 227,370 | JP8 | 227,370 | JP8 | 227,370 |
| JET A | 197,072 | JET A | 197,072 | JET A | 197,072 | JET A | 197,072 |

Day 8
Day 9
Day 10

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| :--- | ---: | :--- | ---: | :--- | ---: | ---: |
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## UNCLASSIFIED <br> Fuel Consumption of JET A



Day 1 Summary in gallons

Day 1

| Mo Gas | 586 |
| :--- | ---: |
| JP8 | 41,412 |
| JET A | 51,528 |

Day 2-3 Summary in Gallons

| Day 2 |  | Day 3 |  |
| :--- | ---: | :--- | ---: |
| Mo Gas | 3,894 | Mo Gas | 3,894 |
| JP8 | 275,093 | JP8 | 275,093 |
| JET A | 197,072 | JET A | 197,072 |

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| Day 4 |  | Day 5 |  | Day 6 |  | Day 7 |  |
| :--- | ---: | :--- | ---: | :--- | :--- | :--- | ---: |
| Mo Gas | 2,966 | Mo Gas | 2,966 | Mo Gas | 2,966 | Mo Gas | 2,966 |
| JP8 | 227,370 | JP8 | 227,370 | JP8 | 227,370 | JP8 | 227,370 |
| JET A | 197,072 | JET A | 197,072 | JET A | 197,072 | JET A | 197,072 |

Day 8
Day 9
Day 10

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| :--- | ---: | :--- | ---: | :--- | ---: | ---: |
| JP8 | 227,370 | JP8 | 227,370 | JP8 | 227,370 |
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Questions
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