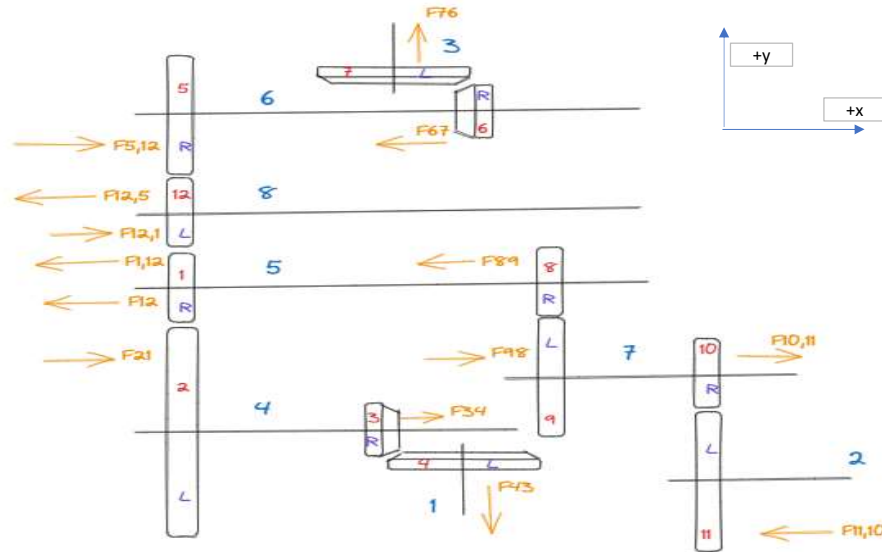


| Shaft 1 | Directions | Shaft 2 | Directions | Shaft 3 | Directions | Shaft 4 | Directions | Shaft 5 | Directions | Shaft 6 | Directions | Shaft 7 | Directions | Shaft 8 | Directions |
|------------|------------|-------------|------------|------------|------------|------------|------------|-----------------|------------|------------|------------|-------------|------------|-------------|------------|
| F4,3 (lb) | | F11,10 (lb) | | F7,6 (lb) | | F2,1 (lb) | | F1,2+F1,12 (lb) | | F6,7 (lb) | | F9,8 (lb) | | F12,1+F12,5 | |
| 475.003142 | -y | 222.298589 | -x | 211.112508 | +y | 133.379154 | +x | 244.528448 | -x | 105.556254 | -x | 111.149295 | +x | 88.9194357 | +x |
| | | | | | | F3,4 (lb) | | F8,9 (lb) | | F5,1 (lb) | | F10,11 (lb) | | | |
| | | | | | | 237.501571 | +x | 111.149295 | -x | 88.9194357 | +x | 222.298589 | +x | | |
| | | | | | | Net Thrust | | Net Thrust | | Net Thrust | | Net Thrust | | | |
| | | | | | | 370.880725 | +x | 355.677743 | -x | 16.6368181 | -x | 333.447884 | +x | | |



Analysis was done based on mode 3 i.e.
That is 1, 12, 5, 6 and 7 has no power flow.
I.e. no forces between 1, 12, 5, 6 and 7.

Mode 1

| Shaft 1 | Directions | Shaft 2 | Directions | Shaft 3 | Directions | Shaft 4 | Directions |
|------------|------------|-------------|------------|------------|------------|------------|------------|
| F4,3 (lb) | | F11,10 (lb) | | F7,6 (lb) | | F2,1 (lb) | |
| 475.003142 | -y | 222.298589 | -x | 211.112508 | +y | 133.379154 | +x |
| | | | | | | F3,4 (lb) | |
| | | | | | | 237.501571 | +x |
| | | | | | | Net Thrust | |
| | | | | | | 370.880725 | +x |

| Shaft 5 | Directions | Shaft 6 | Directions | Shaft 7 | Directions | Shaft 8 | Directions |
|-----------------|------------|------------|------------|-------------|------------|-------------|------------|
| F1,2+F1,12 (lb) | | F6,7 (lb) | | F9,8 (lb) | | F12,1+F12,5 | |
| 244.528448 | -x | 105.556254 | -x | 111.149295 | +x | 88.9194357 | +x |
| F8,9 (lb) | | F5,12 (lb) | | F10,11 (lb) | | | |
| 111.149295 | -x | 88.9194357 | +x | 222.298589 | +x | | |
| Net Thrust | | Net Thrust | | Net Thrust | | | |
| 355.677743 | -x | 16.6368181 | -x | 333.447884 | +x | | |