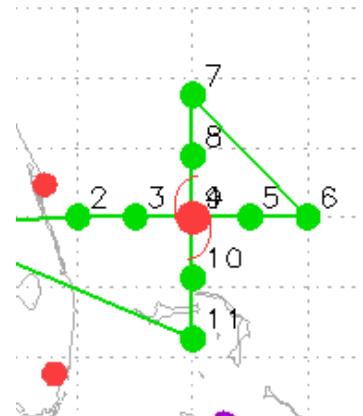


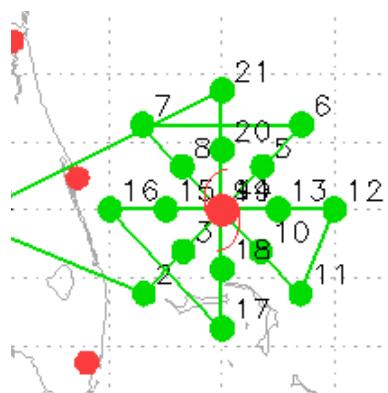
APPENDIX A
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CURRENT AS OF MAY 1, 2019

Figure-4: Centers, mid-points and turn points of each leg [10 sondes]
In-pattern duration (105 n mi legs): ~ 2 h 15 min (P-3), 1 h 20 min (G-IV)



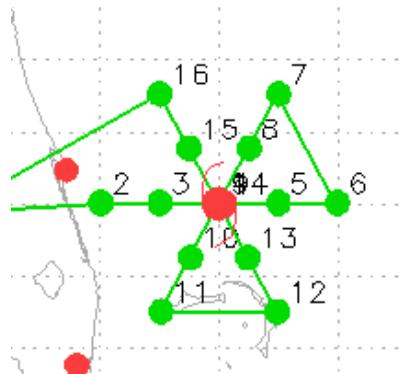
Rotated Figure-4: Centers, mid-points and turn points of each leg [20 sondes]
In-pattern duration (105 n mi legs): ~ 5 h (P-3), 2 h 55 min (G-IV)



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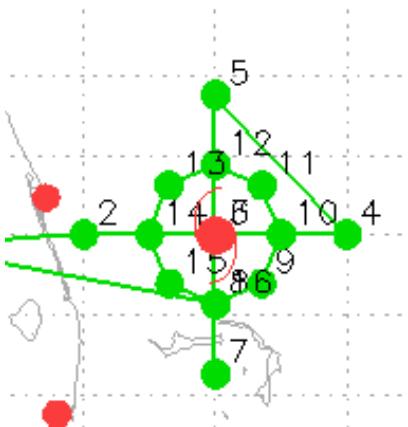
Butterfly: Centers, mid-points and turn points of each leg [15 sondes]

In-pattern duration (105 n mi legs): ~ 3 h 25 min (P-3), 2 h (G-IV)



P-3 Circumnavigation: Center of first pass, end points of Figure-4 and vertices of octagon [14 sondes]

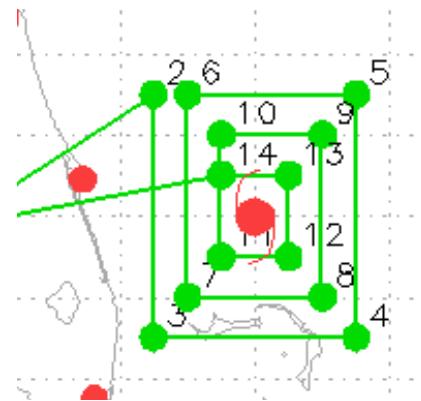
In-pattern duration (105 n mi legs): ~ 4 h 5 min



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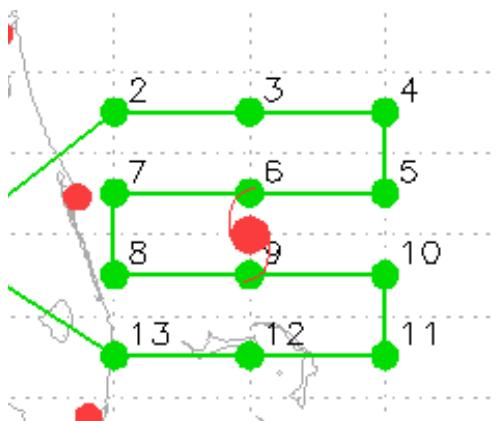
Square Spiral: Turn points [13 sondes]

In-pattern duration (180 n mi on a side): ~ 5 h 50 min (P-3), 3 h 20 min (G-IV)



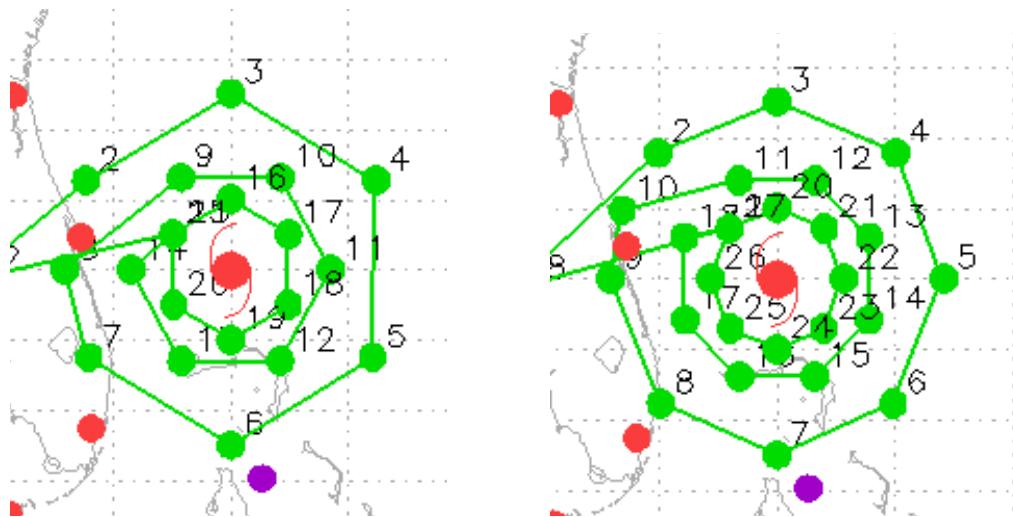
Lawnmower: Turn points and mid-points of N-S legs [12 sondes]

In-pattern duration (240 n mi by 180 n mi): ~ 4 h 20 min (P-3), 2 h 25 min (G-IV)



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G-IV Circumnavigation: Vertices of hexagon (octagon) [18 (24) sondes]
 In-pattern duration (150, 90, 60 n mi): ~ 4 h 25 min (4 h 35 min)



G-IV Star/Star with Circumnavigation: Vertices of star [13/19 sondes with hexagonal circumnavigation]

In-pattern duration (outer points, 210 n mi; inner points, 90 n mi): 4 h

In-pattern duration with circumnavigation: 5 h 15 min

Note: for outer endpoint adjustments, every 0.5° bump inward/outward, subtracts/adds ~45 min from/to the pattern

Note: inner endpoint adjustments, going from 90 n mi to 60 n mi subtracts ~15 min from the pattern

