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| **Index Use** |  | |  | | |  |
|  | , where I = {ASuW, AAW, ASW, ISR, C2, Refueler, Manned} | | | |  |  |
|  | , where J = {F-35C, MQ-9B, MQ-25, GlobalObs, CCA} | | | |  |  |
|  |  | | | |  |  |
| **Given Data** |  | | | |  |  |
|  | , indication of whether aircraft *j* can support warfare area *i,* 0=no, 1=yes | | | |  |  |
|  | , range of aircraft *j* in nm | | | |  |  |
|  | , endurance of aircraft *j* in hrs | | | |  |  |
|  | , weapons payload of aircraft *j* in nm | | | |  |  |
|  |  | | | |  |  |
| **Decision Variables** |  | |  | | |  |
|  | , number of aircraft type *j* in CVW | |  | | |  |
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| **Formulation** |  | |  | | |  |
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|  |  | |  | | |  |
|  |  |  | | *>Minimum number of ISR platforms* | | |
|  |  |  | | *>Minimum number of C2 platforms* | | |
|  |  |  | | *>Minimum number of Refueler platforms* | | |
|  |  |  | | *>Minimum number of ISR platforms* | | |
|  |  |  | | *>2:1 CCA Ratio* | | |

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