

## A problem instance for Doug

**Desired end state:** The objective island secured.

**Initially valid conditions:** None.

### Resources:

4 Amphibious ships	10 Landing craft	48 Fighter aircraft	8 MPA
6 Frigates	40 HELLO	6 SUB	6 Mine hunters
36 Diving teams	4 BN	8 AAR	16 SF Units
48 Strike aircraft	2 ECSS	4 Eng Coy	

### Resource Cost (in order):

BN  
SF  
Diving team  
ECSS  
Eng Coy  
Amphibious ship  
Frigate  
SUB  
Strike aircraft  
Fighter aircraft  
MPA  
Mine hunter  
AAR  
Landing craft  
HELLO

Task ID	Task Name	Preconditions	Effects	Duration	Resources	Lost Resources if Successful	Lost Resources if Failed	Prob of Success
1	Conduct amphibious assault	1. Local air control established (SP) 2. Local sea surface control established (SP) 3. Local sea sub-surface control established (SP) 4. En route sea mines cleared (NP) 5. POE established (NP)	1. The objective island secured (PE)	8 Hours	2 Amphibious Ships 8 Landing Craft 3 BN	NIL	1 Amphibious Ship 2 Landing Craft 1 BN	95%
2	Conduct air combat patrol	1. FOB established (NP) 2. Fighter aircraft deployed to the AO (NP) 3. En route refueling provided (SP)	1. Local air control established (SE)	16 Hours	12 Fighter aircraft	1 Fighter aircraft	4 Fighter aircraft	90%
3	Conduct ASW operation with MPA	1. FOB established (NP) 2. MPA deployed to the AO 3. Local air control established (SP)	1. Local sea sub-surface control established (SE)	10 Hours	4 MPA	1 MPA	2 MPA	95%
4	Conduct ASW operations with Frigates	1. Local air control established (SP)	1. Local sea sub-surface control established (SE)	10 Hours	2 Frigates	NIL	1 Frigate	90%
5	Conduct ASW operations with Submarines	NIL	1. Local sea sub-surface control established (SE)	40 Hours	2 SUB	NIL	1 SUB	80%
6	Conduct airborne operations to secure POE	1. Local air control established (SP) 2. FOB established (NP) 3. FARP established (NP)	1. POE secured (PE)	24 Hours	12 HELO 1 BN	2 HELO	6 HELO 1 BN	95%
7	Conduct maritime escort operation	1. Local air control established (SP)	1. Local sea surface control established (SE)	20 Hours	4 Frigates	NIL	1 Frigate	95%
8	Conduct mine clearance operation with mine	1. Local air control established (SP) 2. Local sea surface control	1. En route sea mines cleared (PE)	48 Hours	4 Mine Hunters	NIL	2 Mine Hunters	90%

	hunters	established (SP)Local sea sub-surface control established (SP)						
9	Conduct OCA	1. Enemy air defence suppressed (SP) 2. FOB established (NP) 3. Strike aircraft deployed to the AO (NP) 4. Maintenance of current intelligence	1. Air superiority achieved (PE) 2. Local air control established (PE)	20 Hours	36 Strike aircraft	1 Strike aircraft	8 Strike aircraft	85%  Will fail in bad weather
10	Conduct SF strike to achieve disruption of enemy air capability	NIL	1. Air superiority achieved (SE) 2. Local air control established (SE)	60 Hours	12 SF Units	1 SF Unit	4 SF Unit	60%
11	Conduct surveillance operation with SF	NIL	1. Maintenance of current intelligence (SE)	The entire campaign	4 SF Units	NIL	1 SF Unit	75%
12	Establish FOB	NIL	1. FOB established (PE)	60 Hours	1 ECSS	NIL	NIL	99%
13	Establish FARP	NIL	1. FARP established (PE)	40 Hours	1 Eng Coy	NIL	NIL	99%
14	Provide AAR	1. FOB established (NP) 2. AAR aircraft deployed to the AO (NP)	1. En route refueling provided (SE)	20 Hours	4 AAR	NIL	NIL	99%
15	Provide SEAD	1. FOB established (NP) 2. Fighter aircraft deployed to the AO (NP)En route refueling provided (SP)	1. Enemy air defence suppressed (SE)	20 Hours	6 Fighter aircraft	NIL	2 Fighter aircraft	96%
16	Deploy AAR aircraft to the AO	NIL	1. AAR aircraft deployed to the AO (NP)	48 Hours	-4 AAR (Add resources)	NIL		99%
17	Deploy fighter aircraft to the AO	NIL	1. Fighter aircraft deployed to the AO (NP)	48 Hours	-16 Fighter aircraft (Add resources)	NIL		99%
18	Deploy strike aircraft to the AO	NIL	1. Strike aircraft deployed to the AO (NP)	48 Hours	-16 Strike aircraft (Add resources)	NIL		99%
19	Secure POE with	1. FARP established (NP)	1. POE secured (PE)	30 Hours	12 SF Units	1 SF Unit	6 SF Units	85%

	SF and HELO				4 HELO	1 HELO	3 HELO	
20	Secure POE with SF and SUB	NIL	1. POE secured (PE)	60 Hours	12 SF Units 3 SUB	1 SF Unit	6 SF Units 1 SUB	85%
21	Conduct surveillance operation with MPA	1. FOB established (NP) 2. MPA deployed to the AO	1. Maintenance of current intelligence (SE)	50 Hours	2 MPA	NIL	1 MPA	70%
22	Deploy MPA to the AO	NIL	1. MPA deployed to the AO (PE)	48 Hours	-4 MPA	NIL		99%
23	Conduct mine clearance operation with divers	NIL	1. En route sea mines cleared (PE)	120 Hours	24 Diving teams	NIL	4 Diving teams	80%
24	Conduct airborne operations to occupy the objective island	1. Local air control established (SP) 2. FOB established (NP) 3. FARP established (NP)	1. The objective island secured (PE)	12 Hours	36 HELO 3 BN	2 HELO	12 HELO 1 BN	70%