

1 VISIBILITY

a APPLY TO ALL CONDITIONS

Code 9 (exceptionally clear)	0
Code 8 (very clear)	- 1
Code 7 (clear)	- 3
Code 5-6 (haze, light haze)	- 6
Patchy fog or squalls	- 8

b ADDITIONAL FOR DAWN/DUSK CONDITIONS

Target silhouetted by horizon	+ 1
Target in darkness	- 2
None of above	0

c ADDITIONAL FOR NIGHT CONDITIONS

No moonlight	- 5
Moonlight	- 3

d ADDITIONAL FOR ILLUMINATION (1b or 1c)

Target afire or illuminated by searchlight	+ 3
Target using searchlight OR is illuminated	+ 1

1e BLIND FIRE

Firing ship is using Blind Fire (target cannot be seen)	- 12
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2 SMOKE

* Cumulative and does not apply to Blind Fire using RADAR

Target obscured by battle smoke	- 1
Target obscured by funnel smokescreen	- 3

3 EVASIVE ACTION / EMERGENCY TURN

Target only in EA	- 4
Firing ship only in EA	- 3
Target and firing ships in EA	- 10

4 TARGET ACQUISITION

Firing on different ship from last turn	- 3
Target ship hit by firing ship last turn	+ 1

5 FIRING SHIP UNDER FIRE

Under fire from 3 or more ships during this turn	- 2
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6 OVER CONCENTRATION & BARRAGE

1 ship firing at target with 1 battery	0
For each additional primary, secondary or tertiary battery of any ship firing at same target	- 1
For each additional primary, secondary or tertiary battery of any ship using barrage fire at same target	- 2

7 SIZE OF TARGET SHIP

TS (from Ship Log of target ship)	#
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8 SPOTTER AIRCRAFT

Spotter aircraft (target visible from firing ship)	+ 2
Spotter aircraft (blind fire)	+ 0

9 BATTLE FACTOR

Sea State + Crew Rating (from Ship Log)	#
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10 FIRE CONTROL SOLUTION

Modifier from Fire Control Table (from Ship Log)	#
Fire Control Radar rating (from Ship Log)	#

11 PHYSICAL RANGE TO TARGET

2,000 yards or less	+ 7
2,100 to 5,000 yards	+ 5
5,100 to 10,000 yards	+ 1
10,100 to 17,000 yards	0
17,100 to 21,000 yards	- 5
21,100 to 24,000 yards	- 8
Over 24,000 yards	- 11

Proceed to CHART 11 to determine number of hits.

NUMBER OF SHELLS	HITS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	----	01-01	01-01	01-01	01-02	01-02	01-03	01-03	01-04	01-04	01-05	01-05	01-06	01-06	01-07	01-07
2	1	----	01-01	01-01	01-02	01-03	01-04	01-05	01-06	01-07	01-08	01-09	01-10	01-11	01-12	01-13	01-14
2	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3	1	01-01	01-01	01-02	01-03	01-04	01-06	01-07	01-09	01-10	01-12	02-13	02-14	02-16	02-17	02-18	02-20
2	2	----	----	----	----	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-01	01-01
4	1	01-01	01-02	01-03	01-04	01-06	01-08	01-10	02-11	02-13	02-15	02-17	02-19	03-20	03-22	03-24	04-25
2	2	----	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-01	01-01	01-02	01-02	01-03
5	1	01-01	01-02	01-04	01-05	01-07	01-10	02-12	02-14	02-16	02-18	03-21	03-23	04-25	04-27	04-29	05-30
2	2	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-02	01-02	01-03	01-03	01-03	01-04
6	1	01-01	01-03	01-04	01-06	01-09	02-11	02-14	02-17	03-19	03-22	04-24	04-26	05-29	06-31	06-33	07-35
2	2	----	----	----	----	----	01-01	01-01	01-01	01-02	01-02	01-03	01-03	01-04	01-05	01-05	02-06
3	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	01-01
7	1	01-02	01-03	01-05	01-07	01-10	02-13	02-16	03-19	03-22	04-25	04-28	05-30	06-33	07-35	08-38	09-40
2	2	----	----	----	----	----	01-01	01-01	01-02	01-02	01-02	01-03	01-03	01-04	01-05	02-07	02-08
3	3	----	----	----	----	----	----	----	----	----	----	----	----	----	01-01	01-01	01-01
8	1	01-02	01-04	01-06	01-08	02-11	02-15	03-18	03-22	04-25	05-28	05-31	07-34	08-36	09-39	10-42	11-44
2	2	----	----	----	----	01-01	01-01	01-02	01-02	01-03	01-04	01-04	02-06	02-07	02-08	02-09	02-10
3	3	----	----	----	----	----	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-01
9	1	01-02	01-04	01-07	01-09	02-13	02-17	03-20	04-24	05-27	06-31	07-34	08-37	09-40	11-43	13-45	14-48
2	2	----	----	----	----	01-01	01-01	01-02	01-03	01-04	01-05	02-06	02-07	02-08	02-10	03-12	03-13
3	3	----	----	----	----	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-02	01-02
10	1	01-02	01-05	01-07	01-10	02-14	03-18	03-22	04-26	06-30	07-34	08-37	10-40	11-43	13-46	14-49	16-52
2	2	----	----	----	----	01-01	01-02	01-02	01-03	01-05	02-06	02-07	02-09	02-10	03-12	03-13	04-15
3	3	----	----	----	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-02	01-02	01-03

NUMBER OF SHELLS	HITS	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	1	01-07	01-08	01-08	01-09	01-09	01-10	01-11	01-12	01-13	01-14	01-15	01-16	01-17	01-18	01-19	01-20
2	1	01-14	02-14	02-15	02-16	02-17	02-19	02-21	02-23	03-24	03-26	02-28	04-29	04-31	04-33	05-34	05-36
2	2	----	01-01	01-01	01-01	01-01	01-01	01-01	01-01	01-02	01-02	01-02	01-03	01-03	01-03	01-04	01-04
3	1	02-20	03-21	03-22	03-23	03-25	04-27	04-30	05-32	05-34	06-36	07-39	08-41	09-43	10-45	11-47	11-49
2	2	01-01	01-02	01-02	01-02	01-02	01-03	01-03	01-04	01-04	01-05	01-06	01-07	01-08	02-09	02-10	02-10
3	3	----	----	----	----	----	----	----	----	----	----	----	----	----	01-01	01-01	01-01
4	1	04-25	04-27	04-28	05-30	05-31	06-34	07-37	09-40	09-43	11-45	12-48	13-50	15-53	16-55	17-57	19-59
2	2	01-03	01-03	01-03	01-04	01-04	01-05	01-06	01-08	02-08	02-10	02-11	02-12	03-14	03-15	03-16	04-18
3	3	----	----	----	----	----	----	----	----	01-01	01-01	01-01	01-01	01-02	01-02	01-02	01-03
5	1	05-30	05-32	06-34	07-36	08-38	09-41	11-44	12-47	14-50	16-53	17-56	19-58	21-61	23-63	26-65	27-67
2	2	01-04	01-04	01-05	01-06	02-07	02-08	02-10	02-11	03-13	03-15	04-16	04-18	05-20	06-22	07-25	07-26
3	3	----	----	----	----	01-01	01-01	01-01	01-01	01-02	01-02	01-03	01-03	01-04	01-05	01-06	01-06
6	1	07-35	08-37	09-39	10-41	11-43	12-47	14-50	17-54	19-57	21-60	23-62	26-65	28-67	31-70	33-72	34-74
2	2	02-06	02-07	02-08	02-09	02-10	03-11	03-13	04-16	04-18	05-20	06-22	07-25	08-27	09-30	10-32	11-34
3	3	01-01	01-01	01-01	01-01	01-01	01-02	01-02	01-03	01-03	01-04	01-05	01-06	01-07	01-08	01-09	01-10
7	1	09-40	10-42	11-44	12-46	14-48	16-52	19-56	21-59	24-62	27-65	29-68	32-70	35-73	38-75	41-77	43-79
2	2	02-08	02-09	02-10	03-11	03-13	04-15	04-18	05-20	06-23	07-26	08-28	10-31	11-34	13-37	14-40	16-42
3	3	01-01	01-01	01-01	01-02	01-02	01-03	01-03	01-04	01-05	01-06	01-07	01-08	01-09	01-10	01-12	01-13
8	1	11-44	13-46	14-49	15-51	17-53	20-57	23-61	26-64	29-67	32-70	35-73	38-75	42-77	45-80	48-81	51-83
2	2	02-10	03-12	03-13	03-14	04-16	05-19	06-22	07-25	08-28	10-31	12-34	13-37	15-41	17-44	19-47	21-50
3	3	01-01	01-02	01-02	01-02	01-03	01-04	01-05	01-06	01-07	01-09	01-11	01-12	01-14	01-16	01-18	01-20
9	1	14-48	15-50	17-53	18-55	20-57	24-61	27-65	31-68	34-71	38-74	41-77	44-79	48-81	51-83	54-85	57-87
2	2	03-13	03-14	04-16	04-17	05-19	06-23	08-26	09-30	11-33	13-37	15-40	17-43	20-47	22-50	25-53	27-56
3	3	01-02	01-02	01-03	01-03	01-04	01-05	01-07	01-08	01-10	01-12	01-14	01-16	01-19	01-21	01-24	01-26
10	1	16-52	18-54	20-57	22-59	24-61	27-65	31-69	35-72	39-75	43-78	47-80	50-83	54-84	57-86	60-88	63-89
2	2	04-15	04-17	05-19	06-21	06-23	08-26	10-30	12-34	14-38	16-42	19-46	22-49	24-53	27-56	30-59	33-62
3	3	01-03	01-03	01-04	01-05	01-05	01-07	01-09	01-11	01-13	01-15	01-18	01-21	01-23	01-26	01-29	01-32

Proceed to appropriate version of CHART J to determine hit location