A & A GAME ENGINEERING PRODUCT SUPPORT



RULES SUPPLEMENT ADDITIONAL RULES

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These rules have been extracted from the previous edition of the rules, and are not widely used. They offer an expansion to the normal game for those who wish to simulate more detail. They work with all editions of the rules.

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Additional Rules

1—Communications

In most games communications between ships and squadrons would be an unnecessary inconvenience, especially in a face to face action between two players. However, in fleet actions where squadrons are commanded by individual players, especially with the services of an umpire, the use of communications can add a new dimension to the game. These rules cover signals between squadron commanders and the fleet admiral, and to and from detached ships. Communications within squadrons is assumed to take place independently of these rules.

Tactical Communication

Tactical communication was generally by way of signal flags or towards the end of the period, by lamps and in the more well-to-do navies, by radio (obviously the wireless will be of more significance where these rules are used for post-1906 actions such as the Balkan Wars of 1912-13). Each technological advance leads to an increase in the range over which messages can be passed. Flags can be seen and deciphered at ranges of up to 5 miles, lamps up to 7.5 miles and radio up to 20 miles.

Where flags or lamps are used, a message will be made up of a number of elements selected from the fleet's signal book. Where messages are passed by wireless each element can consist of a single sentence made up of not more than 10 words. The number of elements which a captain or admiral can include in their message is dependent on the Captain's or Admiral's Ranking.

Admiral's Ranking	Captain's Ranking	Elements
Superior	Superior	8
Inspired	Inspired	7
Keen	Average	6
Lacklustre	Inept	5
Inept, Dullard	Incompetent	4

Signalling is fraught with possibilities for confusion. When a message is sent, roll for correct interpretation by the recipient. Roll a d10 and add the recipient's Ranking. Subtract 1 per element sent over the number of elements the recipient could send themselves. If the result is 1 or less part of the message is garbled. Determine randomly which element has been lost (e.g. if a 6 element message is sent, roll a d6. If a 7 element message is sent roll a d10 and repeat rolls of 8 or more). This element should be erased or, especially in umpired games, could be replaced with another element chosen at random.

Before the game begins each side should generate a signal book. A sample book is given below, with spaces to allow for fleet specific commands and enquiries to be entered.

NB Fleet manoeuvring signals will generally be followed by the number of the operative ship (e.g. the ship to be followed or formed up upon). If this is not the case, and confusion could result from a following element, the element '99' or blank can be inserted. (It acts as a full stop).

Example

A signal element can consist of a signal number plus a course. So signal 63-5-01 would be "form line ahead of nr. 5, course NNE". 65-57-1-12-55-2' would be "form line abreast to port of ship no. 1 and head West. Engage enemy squadron no. 2."

$\theta x \ 1 x$	Courses	<i>4x</i>	Ship Handling
00	NORTH	41	AHEAD ONE THIRD
01	NORTH NORTH EAST	42	AHEAD TWO THIRDS
02	NORTH EAST	43	AHEAD FULL
03	EAST NORTH EAST	44	MAKE YOUR SPEED
04	EAST	45	FLEET SPEED
05	EAST SOUTH EAST	46	ANCHOR
06	SOUTH EAST	47	WEIGH ANCHOR
07	SOUTH SOUTH EAST	48	MOVE ASTERN
08	SOUTH	5 <i>x</i>	General Order signals
09	SOUTH SOUTH WEST	51	SHIP NO.
10	SOUTH WEST	52	SQUADRON NO.
11	WEST SOUTH WEST	53	ENGAGE ENEMY MORE CLOSELY
12	WEST	54	ENGAGE OPPOSITE NUMBERS
13	WEST NORTH WEST	55	ENGAGE ENEMY SQUADRON
14	NORTH WEST	56	ENGAGE WITH TORPEDOES
15	NORTH NORTH WEST	57	PORT
2x	Misc. Signals	58	STARBOARD
21	ENEMY IN SIGHT	6x	Fleet Manoeuvring
22	PREPARE FOR BATTLE	61	TURN TO PORT IN SUCCESSION
23	DISENGAGE	62	TURN TO STBD IN SUCCESSION
24	LEAVE OFF CHASE	63	LINE AHEAD
25	ATTACK TRANSPORTS	64	FOLLOW/LINE ASTERN
26	FIGHTING FORMATION	65	LINE ABREAST
27	PART COMPANY	66	ECHELON PORT
28	TOW SHIP No	67	ECHELON STBD
29	EXECUTIVE	68	FORM 2 COLUMNS
3x	Qualifications	69	CLOSE AROUND ADMIRAL
31	PERMISSION TO	7x - 9x	Private Signals
32	AFFIRMATIVE		Squadron or fleet specific signals created in advance by the fleet admiral
33	NEGATIVE		
34	TBD	99	BLANK
35	CONVOY / TRANSPORT		
36	CRUISER		
37	BATTLESHIP		
38	DELAY SIGNAL		
39	DISREGARD LAST (ANNUL)		

Strategic Communications

Strategic communication was generally by telegraph or despatch boat. Telegraphic messages will generally take about a day to be transmitted from the originator to the receiving station, probably less if no intermediate repeater stations are involved (a message from one port to its neighbour on a direct line could, for instance, be regarded as almost instantaneous. In a campaign setting the umpire will have to determine transmission rates, but the above can be used as a guide. Despatches are of course delivered once the courier reaches their destination. Once a message has been received it can be passed to ships at sea by the signalling rules above, or passed directly if the ship puts in to the receiving station.

2—Survivors

At some point during a game is almost certain that the crew of at least one ship will seek to evacuate their vessel. The time they have available to make their escape depends on the 'Mode of Loss' (MoL) of the ship. MoL is expressed as one of four basic rates: Long Term, Medium Term, Short Term and Catastrophic Failure.

Long Term Failure occurs when the crew has enough time to carry out an orderly evacuation. Examples are slow floods and most fires. In this case most, if not all of those aboard are assumed to have escaped.

Medium Term Failure occurs when the crew has a fair limited time to escape. Examples are the loss of the final damage point resulting in rapid loss of structural integrity and buoyancy. In this case the chance of escape is fair.

Short Term Loss occurs when the ship is lost in a short space of time. This is deemed to have occurred if, in the turn she is sunk, the ship suffers ADV or BDV loss equal to 50% or more of her initial value. Note that the ship need not be capable of sustaining that damage in its final turn. For example, a ship with an initial ADV of 10 has previously suffered an ADV loss of 6. In the turn she is sunk she suffers enough hits to reduce her ADV by 6. Although she only had 40% of her ADV remaining the amount of effective incoming fire was sufficient to cause a rapid loss of the ship. In this case the chance of escape is moderate.

Catastrophic Failure occurs when the ship is consumed by an unexpected, instantaneous disaster. Typical examples are magazine explosions or sudden capsize. In this case the chance of escape is very low.

Abandoning Ship

Before the game starts players should determine how many personnel are on board each vessel. Exact values can be found in a standard reference, but general 'rules of thumb' are given in the table below for different ship types.

Typical Complements Table					
Туре	Personnel per 100t	Overload Multiplier			
Pre-dreadnought	4.0-5.0	x3			
Armoured cruiser, protected cruiser etc.	7.5	x3			
Light cruiser	8	x3			
TBD	10.5	x3			

Note that the roll for survivors should be made as soon as the decision to abandon ship is made. This may not be the turn in which the ship is sunk - in a campaign setting a player may decide to scuttle a ship, bringing another vessel alongside beforehand to

take off the crew. As will be seen below, when a ship is in a sinking condition but has not yet sunk the crew can be taken off directly to another vessel.

When a ship sinks roll a d10, using the modifiers shown, to determine the percentage of the crew who have managed to make it over the side and into the water, or into the lifeboats.

A cruiser suffers a magazine explosion and sinks (Catastrophic, -4). Her crew are poorly trained (-1) and had not cleared for action (-1 she was surprised). Moreover the weather is bad (-3). Total modifiers are -9, so the chances of there being any survivors is slim.

A battleship is sunk by gunfire after a long engagement. MoL is Medium Term (+0). The crew is elite (+2). A 5 is rolled, modified to 7, so 50% of the crew get off.

Survival Rates											
Die Roll	11+	10	9	8	7	6	5	4	3	2	1 or less
% Survivors	100	95	85	70	50	35	15	10	5	2	0
-6 Submerged submarine											

-6	Submerged submarine
-4	Ship MoL is Catastrophic
-3	Bad Weather (sea state 8+) Submarine on the surface (not Long Term)
-2	Ship MoL is Short Term
-1	Poor Weather (sea state 6-7) Ship not cleared for Action
+0	Ship MoL is Medium Term
+1	Good Weather (sea state 1-3)
+3	Ship MoL is Long Term
+/- up to 2	Crew Quality

Survivors

Once the survivors have taken to the water their ordeal has just begun. Depending on the local conditions there is a chance that additional fatalities will occur. Every half hour roll a d10. The score is the percentage of the survivors who expire in that period. Die rolls are modified as shown below.

-5	Good Weather (sea state 1-3)
-3	Survivors in open lifeboats
+0	Survivors in water or open rafts
+1	per day in water Poor Weather (sea state 6-7) per 3 days in lifeboats Air temperature below 10 ⁰
+2	Bad Weather (sea state 8+) Shark infested waters Sinking occurs close to rocky shore
+3	Air temperature below 0^0

Rescue

Now that the survivors are in the water, in lifeboats, or are in a ship which is rapidly taking on water it is time to effect a rescue. Survivors can be picked up in various ways, grouped together as:

- Picked up by ships boats
- Picked up from the water by a rescue ship (scrambling nets etc.)
- Direct transfer

Boats

Making a rescue by ships boats is a time consuming task. The rescue ship must slow to about 5 knots to launch boats, after which it will take 1 turn to lower boats. The boats will then move into the area of the survivors (assume 5 knots for boats with oars, 10 knots for powered boats). The boats must remain stationary for 1 turn to pick up survivors, then transit back to the rescue ship and spend 1 turn either being recovered or transferring survivors via scrambling nets. Assume each boat can recover 30 survivors, 10 for smaller boats such as those carried by TBDs.

Direct Rescue

This involves driving the rescue ship into the area of survivors, coming to a complete stop and pulling them directly from the water. It is assumed that a typical warship can recover 50 survivors per turn whilst stopped (25 for TBDs), but with a minimum time stopped of 2 turns (10-12 minutes). During this period the rescue ship is, of course, quite vulnerable.

Direct Transfer

If the ship is sinking slowly the survivors can be taken off directly (without getting their feet wet!). This involves the rescuing ship coming alongside and heaving to. Survivors can transfer to the rescue ship at a rate of 75 per turn (40 for TBDs).

Capacities

Obviously there are limits to the number of survivors who can be accommodated on board a rescue ship. This will vary depending on the time taken to transit to a safe port for transfer ashore, local weather conditions, etc. The Typical Complements Table above gives guidelines on the overload numbers which can be taken on to various types of ship.

Personalities

These rules come into their own when personalities are considered, in particular the Admirals or Captains whose roles the players are assuming. The percentage number of survivors is used as a percentile die roll when determining the fate of personalities. For example, if 60% of a ships crew escape the sinking the Captain has a 60% chance of survival. If 2% of the crew expire due to exposure in a half hour period there is a 2% chance the Captain is one of them, and so on. This rule should be of particular use in campaigns where players would wish to rescue particularly successful 'player characters'

3—Balloons

Captive balloons, of the spherical and kite variety, were used occasionally for naval purposes, generally towed behind the parent ship with a suspended gondola in which rode the observers. Deploying and recovering a balloon is a long task, requiring an Average crew or better, and taking two turns to complete the deployment or recovery. Successful balloon use was dependent on the weather, and so they cannot be used if the wind is stronger than a Fresh Breeze. In addition the parent ship is limited to 15 knots whilst the balloon is deployed.

Observation distances from balloons are increased 25% over the distances achievable from the surface. The real bonus is that the effects of intervening terrain can be eliminated from the elevated position. When spotting from a balloon, low headlands, small islands and smoke can be ignored (the umpire will have to determine which terrain features may still obstruct line of sight, but generally balloons were flown from around 500 feet. Gunnery direction from balloons was, however, far less accurate than when directed from the firing ship - apply a -5 modifier to all 'On Target' rolls where spotting from a balloon is the primary source of targeting data.

Balloons can be shot at by TBD guns or quick firers if the firing ship is within 40cm. Roll a d20, with the balloon being hit and destroyed on a roll of 20.

Note that shore installations can use balloons as well as ships.