

MAPS, MAPPING, AND GEOGRAPHY

For a Modern/"past" exploration game recently, I found that I needed some additional rules for handling in-game map-making. I also wasn't happy with the rules as written pertaining to maps, so I decided to do a little expansion. This is a work-in-progress – your comments and critiques would be appreciated.

Maps

Maps provide an equipment bonus to Navigate and Survival checks when used in conjunction with a compass, GPS, or other similar instruments. Maps are also sources of information and may add a bonus to Research or Knowledge checks as well, much in the same way that a book does.

Maps may provide standard bonuses as shown below, or may at the GM's discretion offer equipment bonuses ranging from +1 to +5 to skill checks. It's also possible that a poorly drawn or produced map may cause a penalty to skill checks, rather than providing a bonus – a character using such a map will not know that the map causes a penalty until s/he fails a skill check. Remember that a character cannot find a path to a site using Navigate if the character has no idea where the site is located, so at times a map that offers a penalty is still better than no map at all.

The bonuses shown apply to characters with at least one rank in Navigate – the bonus is halved (fractions rounded down) for characters attempting to use a map untrained. Maps that provide a bonus to Survival checks may be used without penalty by characters with ranks in Survival. The equipment bonus provided by a map stacks with that provided by a compass or GPS receiver.

Each map should have specified geographical limits. Map coverage around the world is not uniform – certain types of maps may be unavailable or of lower quality, offering smaller equipment bonus or even a penalty, at the GM's discretion. Certain types of maps may also have restrictions, usually either Res. +1 or Mil. +2, at the GM's discretion.

Mapping software is used to produce maps – this will be covered in more detail in the subsequent section on mapping.

Maps

Aeronautical chart

Size T/Wt. 0.5 lb./Purchase DC 3/Rest. –

Aeronautical charts depict topographical features 500' above mean surface level (AMSL) and obstacles more than 300' above ground level (AGL) – they also include radio beacon frequency guides for significant airfields and crosswind calculators. Charts are often laminated to protect them from the elements and to allow the user to write on them with erasable markers or grease pencils. Aeronautical charts provide a +2

equipment bonus to Navigate checks used in planning an aircraft flight between two or more points.

Nautical chart

Size T/Wt. 0.5 lb./Purchase DC 3/Rest. –

Nautical charts depict surface features, submarine bathymetry, navigation hazards and markers such as buoys or lighthouses, natural and cultural features such as kelp beds and known shipwrecks, and marinas. Charts are often laminated to protect them from the elements and to allow the user to write on them with erasable markers or grease pencils. Nautical charts provide a +2 equipment bonus to Navigate checks used in planning a marine or aquatic vessel voyage between two or more points.

Road map

Size T/Wt. 0.5 lb./Purchase DC 3/Rest. –

Road maps depict interstates, highways, byways, and major arterial roads. They do not show smaller city streets. A road map provides a +2 equipment bonus to Navigate checks for planning trips between cities, towns, and other urban areas or to features like national and state parks or historic sites. (The ubiquitous Michelin map is an example of a mastercraft road map – it offers an additional +1 equipment bonus.)

Souvenir maps

Size T/Wt. 0.5 lb./Purchase DC 2/Rest. -

Souvenir maps generally depict features of recreational or entertainment interest using comical graphics rather than geographical symbols and standards. Souvenir maps provide no bonus to Navigate or Survival skill checks.

Specialized map

Size T/Wt. 0.5 lb./Purchase DC 4/Rest. -

Specialized maps may include soil maps, geological maps, vegetation maps, and so on. Specialized maps provide no bonus to Navigate or Survival checks to avoid becoming lost, but they do provide a +4 equipment bonus to Research checks and a +2 to Knowledge checks in the appropriate field as it pertains to the subject of the map – for example, a vegetation map may provide a +4 to Research checks and a +2 to Knowledge (earth and life sciences) checks while a military map would provide a +2 bonus to Knowledge (tactics or military science) instead.

Street map

Size T/Wt. 0.5 lb./Purchase DC 2/Rest. -

Street maps depict interstates, highways, byways, and arterial, collector, and local roads for a city or town. A street map provides a +2 equipment bonus to Navigate checks for the city or town depicted.

Topographical map

Size T/Wt. 0.5 lb./Purchase DC 3/Rest. -

Topographical maps depict topography and elevation, vegetation, watercourses, infrastructure and buildings. They are identical to the tactical map described in the core rules. A topographical map provides a +2 equipment bonus to Navigate and Survival checks.

Atlases

Road atlas

Size T/Wt. 1 lb./Purchase DC 4/Rest. -

A road atlas is a collection of road maps generally for a large geographic region such as a state, province, or even an entire country. The bonuses provided are the same as those provided for a road map. (Note that this is a variant that replaces the road atlas provided in the core rules.)

Street atlas

Size T/Wt. 0.5 lb./Purchase DC 5/Rest. -

A street atlas is a collection of street maps for a number of cities or towns, usually in close proximity to one another, or a very large city. The bonuses provided are the same as those provided by a street map.

Survey

Size T/Wt. 0.5 lb./Purchase DC 5/Rest. -

A survey is a collection of specialized maps, usually consisting of a guide book and a series of maps, covering a wider geographical area. The bonuses provided are the same as those provided by a particular type of specialized map.

Software

Mapping program

Size - /Wt. - /Purchase DC 10/Rest. -

Mapping software allows a user to produce a street or topographical map as described under Maps, above. The software also provides a selection of basic wayfinding tools and may interface with a GPS unit to share maps and data directly. Most mapping software covers an area roughly the size of a state or province.

Geographic information system

Size - /Wt. - /Purchase DC 22/Rest. -

Geographic information systems combine high-end graphics tools and powerful relational databases to manage geographic information and produce top-quality maps. A geographic information system may be used to produce any type of map shown above for anywhere in the world, subject to GM's discretion.

Mapping

Characters may wish to produce maps during their travels. Creating a map is a two-step process involving Navigate and Craft (visual art) checks.

To provide reference points for the map, the character must make a DC 15 Navigate check for each hour of travel. There is a -2 circumstance penalty for checks made while in traveling through forest terrain. Each check requires a full-round action.

To produce the map itself, the character must then make a Craft (visual art) check. The character gains a +2 equipment bonus to this skill check for using a mapping program and a +4 equipment bonus for using a geographic information system. A character must have at least one rank in Computer Use to qualify for an equipment bonus.

The equipment bonus provided by the map is based on the results of the Craft (visual art) skill check as follows:

- 9 or lower: -1 equipment penalty
- 10-19: No equipment bonus
- 20-24: +1 equipment bonus
- 25-30: +2 equipment bonus
- 31 or higher: +3 equipment bonus

The following new feat is available to characters wishing to sharpen their map-making skills:

Cartographer

You are attuned to every detail that surrounds you.

Benefit: The character gets a +2 bonus on all Navigate and Craft (visual arts) checks.

Geography

While other d20 games such as *Dungeons and Dragons* and *d20 Call of Cthulhu* incorporate a Knowledge (geography) skill, *d20 Modern* covers most aspects of physical geography with the Knowledge (earth and life sciences) skill instead.

For purposes of wayfinding and map-making, five ranks of Knowledge (earth and life sciences) provides a +2 synergy bonus to Navigate, Survival, and Craft (visual art) skill checks at the GM's discretion.

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