

# ***Adventure Design for Roaring Rockets***

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## ***The introduction says how to adapt the adventure to the players***

BE CLEAR WHAT THE ADVENTURE REQUIRES. MAKE THE INFORMATION EASY TO FIND.

- DOES THE ADVENTURE REQUIRE MEN? DOES IT REQUIRE WOMEN? HOW MANY?
- WHAT SKILLS DO THE CHARACTERS NEED TO SUCCEED?
- WHAT EQUIPMENT DOES THE CHARACTERS NEED THAT IS NOT SUPPLIED IN THE ADVENTURE?
- WHAT IF THE CHARACTERS HAVE THEIR OWN SPACECRAFT? WHAT ABILITIES DOES IT NEED?
- IS THERE A SCRIPTURE QUOTATION TO GIVE THE PLAYERS A HINT? PEOPLE 100 YEARS AGO AND THEIR CHARACTERS WENT TO SUNDAY SCHOOL; THIS IS A GENRE-COMPATIBLE WAY TO PROVIDE A HINT. PROVIDE CHAPTER AND VERSE (THAT IS THE WAY THEY DID IT). THE INTERNET QUICKLY GIVES A LIST OF SCRIPTURES ABOUT A SUBJECT.

## ***Genre compatible plot devices***

- PULP SCIENCE FICTION IS USUALLY ABOUT RESCUING IN SOME WAY
- PEOPLE GET KNOCKED OUT A LOT. THIS NEVER SEEMS TO HAVE ANY LONG-TERM EFFECTS.
- NON-PLAYER WOMEN SCREAM WHEN IN PERIL
- WOMEN GET KIDNAPPED, PARTICULARLY AFTER FAINTING
- EVEN DUMB MONSTERS KIDNAP BEAUTIFUL WOMEN INSTEAD OF EATING THEM. THEY USUALLY KEEP THEM IN A LAIR, WHERE THEY CAN BE RESCUED LATER. THE WOMAN CAN EXPECT TO BE PRESENTED WITH DISGUSTING FOOD AND KNOCKED SILLY WHEN SHE TRIES TO ESCAPE. THERE MAY BE A WAY TO KEEP HER THERE WHEN THE MONSTER GOES OUT.
- HEROES HAVE TO FIGHT A LOT OF DINOSAURS. OFTEN WITH SWORDS.
- NON-PLAYER CHARACTERS FALL IN LOVE, AND THEIR LOVE BECOMES A MAJOR PLOT DRIVER. ONCE AN NPC FALLS IN LOVE IT BECOMES THEIR PRIMARY MOTIVATION.
- HEROES DEAL WITH ROYALTY A LOT. A KING AND QUEEN RULE MOST PLANETS OR COUNTRIES WITHIN PLANETS. THERE ARE USUALLY PRINCES AND PRINCESSES.
- ROYALTY FALLING IN LOVE HAPPENS. THEY SOMETIMES FALL IN LOVE WITH HEROES AND HEROINES (LIKE PLAYER CHARACTERS).
- SINCE MOST PLANETS HAVE A CULTURE WHERE WIVES HAVE TO DO AS THEY ARE TOLD, FORCED MARRIAGE MAKES A GREAT PLOT DEVICE. TWISTS CAN INCLUDE A VILLAIN COERCING THE SOLE PRINCESS OR A PLAYER CHARACTER.
- PRISONERS, HOSTAGES, AND CAPTIVES GET TIED TO CHAIRS BY BAD GUYS.
- SOME BAD GUYS HAVE THE SAME AVERSION TO DEADLY FORCE THE CHARACTERS DO. THEY MAY HAVE A CODE OF HONOR, LIKE ALWAYS KEEPING THEIR WORD.
- MANY BAD GUYS USE UNARMED COMBAT AND MELEE WEAPONS. THEY ARE REASONABLY EFFECTIVE IN THIS GAME.
- CHARACTERS OFTEN WEAR SPEEDOS/BIKINIS AS UNDERWEAR. THEY HAVE TO SWIM A LOT, AND OFTEN GET STRIPPED OF OUTER CLOTHING.
- BAD GUYS OFTEN STRIP CAPTIVES DOWN TO THEIR UNDERWEAR SO THEY CANNOT CONCEAL ANYTHING. ESPECIALLY CAPTIVE PLAYER-CHARACTERS.
- CRASHING THROUGH JUNGLES QUICKLY SHREDS OUTER CLOTHING, BUT NEVER AFFECTS UNDERWEAR.

### ***Which star should I put the adventure on?***

EARTH SPACE IS MOST THINGS WITHIN 75 LIGHT YEARS OF THE EARTH.

- WANT A CIVILIZED PLANET WITH LOTS OF COMMERCE WITH EARTH AND FEW EXTERNAL THREATS? PICK A STAR WITHIN 25 LIGHT YEARS OF EARTH.
- WANT A FRONTIER WORLD WITH FEW HUMANS THAT IS VULNERABLE TO EXTERNAL THREATS? PICK A STAR 50-75 LIGHT YEARS OUT.
- WANT SOMETHING IN BETWEEN? PICK A STAR 25-50 LIGHT YEARS OUT.

OMIT STARS THAT WOULD BE UNLIKELY TO HAVE HABITABLE PLANETS:

- NO RED GIANTS (THEY COOK THEIR PLANETS)
- NO POST-COLLAPSE STARS LIKE WHITE DWARVES OR NEUTRON STARS
- SOME MULTI-STAR SYSTEMS HAVE NO HABITABLE ZONE
- NO REALLY BIG STARS (THEY BURN THROUGH THEIR FUEL AND GO BOOM BEFORE THE PLANET HAS A CHANCE TO DEVELOP)

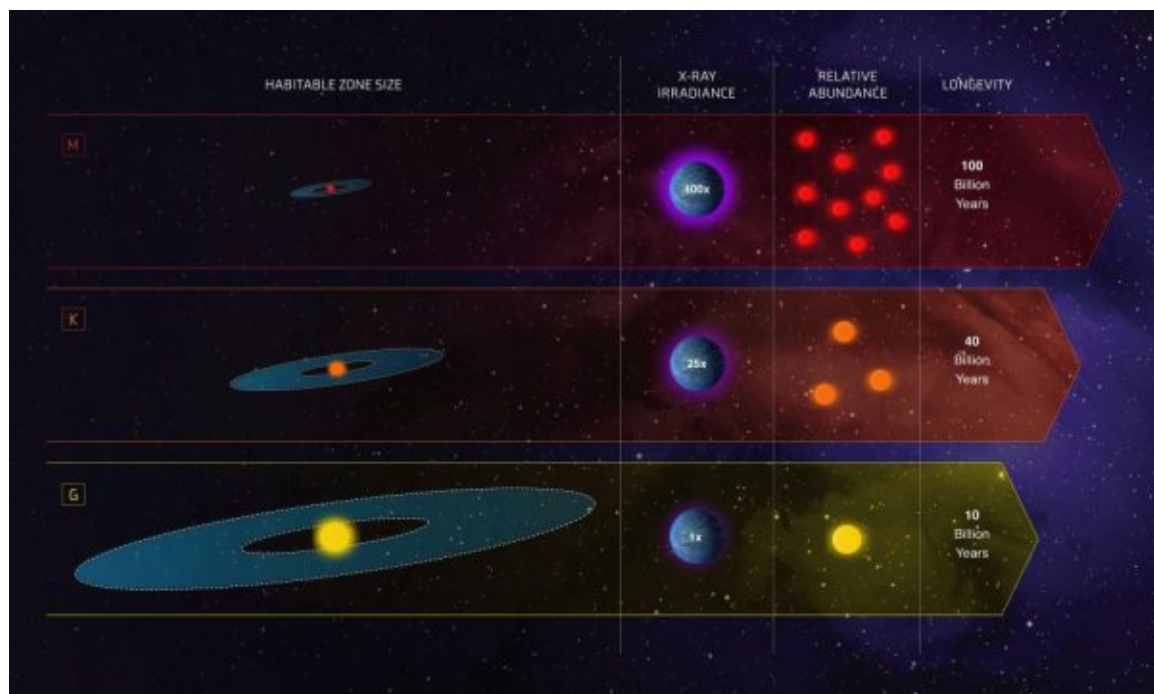
OMIT PLANETS THAT ARE TOO BIG (THEY HAVE TOO MUCH GRAVITY) OR TOO SMALL (THEY WOULD NOT BE ABLE TO HOLD DOWN AN ATMOSPHERE). REALLY BIG PLANETS CAN HAVE HABITABLE MOONS.

STARS KNOWN TO HAVE DUST RINGS, ASTEROID BELTS, AND/OR PLANETS ARE GOOD CHOICES, BUT WE DO NOT HAVE THIS INFORMATION ON MOST STARS.

MOST INHABITED STARS WILL BE CLASS F G, K, OR TYPE IV. OUR SUN IS CLASS G. YOU COULD ALSO PUT INHABITED PLANETS AROUND SOME CLASS A OR M CLASS STARS.

IF A KNOWN BIG PLANET OCCUPIES THE HABITABLE ZONE OF A STAR, MAKE YOUR INHABITED PLANET A MOON ORBITING IT.

THE INTERNET IS A GREAT SOURCE OF STAR LISTS. [www.SolStation.com](http://www.SolStation.com) HAS LISTS OF STARS NEAR YOUR TARGET.



### **Types of stars**

THERE ARE MANY COMPETING STAR CLASSIFICATIONS. THIS DECODER TRANSLATES THE ONES YOU ARE LIKELY TO SEE INTO LAYMAN'S TERMS.

**PROTOSTAR:** A BALL OF GAS THAT HAS NOT YET COLLAPSED DOWN ENOUGH TO FORM A STAR. PLANETS HAVE NOT FORMED YET.

**T TAURI:** A NEWBORN STAR. PLANETS ARE FORMING OR NEWLY FORMED. NO INHABITABLE PLANETS.

**TYPE O HYPERGIANT:** A HUGE, SHORT-LIVED STAR DOOMED TO GO SUPERNOVA. NO INHABITABLE PLANETS.

**TYPE I SUPERGIANT:** A HUGE, SHORT-LIVED STAR DOOMED TO GO SUPERNOVA. NO INHABITABLE PLANETS.

**TYPE II BRIGHT/LUMINOUS GIANT:** WHEN A STAR LARGER THAN OUR SUN USES UP ITS HYDROGEN FUEL AND STARTS BURNING HELIUM, IT SWELLS UP INTO A BRIGHT GIANT AND BURNS UP THE INNER SOLAR SYSTEM. IT WILL EVENTUALLY RUN OUT OF FUEL AND SHRINK DOWN INTO A WHITE DWARF. NO INHABITABLE PLANETS.

**TYPE III RED GIANT:** WHEN A STAR THE SIZE OF OUR SUN USES UP ITS HYDROGEN FUEL AND STARTS BURNING HELIUM, IT SWELLS UP INTO A RED GIANT AND BURNS UP THE INNER SOLAR SYSTEM. IT WILL EVENTUALLY RUN OUT OF FUEL AND SHRINK DOWN INTO A WHITE DWARF. NO INHABITABLE PLANETS.

**TYPE IV SUBGIANT:** WHEN A STAR SMALLER THAN OUR SUN USES UP ITS HYDROGEN FUEL AND STARTS BURNING HELIUM, IT SWELLS UP INTO A SUBGIANT AND BURNS UP THE INNER SOLAR SYSTEM. IT WILL EVENTUALLY RUN OUT OF FUEL AND SHRINK DOWN INTO A WHITE DWARF. NO INHABITABLE PLANETS.

*(TYPE V IS THE MAIN SEQUENCE, AND USES THE LETTER CLASS DESIGNATIONS)*

**CLASS O BLUE GIANT:** LARGE, HOT, SHORT-LIVED STARS DOOMED TO BECOME A SUPERGIANT AND THEN GO SUPERNOVA. NO INHABITABLE PLANETS.

**CLASS B BLUE-WHITE SUBGIANT:** LARGE, HOT, SHORT-LIVED STARS. NO INHABITABLE PLANETS.

**CLASS A WHITE:** LARGER, HOTTER, AND SHORTER-LIVED THAN OUR SUN. SOME CAN HAVE INHABITED PLANETS, BUT THE STAR WILL BE NEARING THE END OF ITS SAFE LIFESPAN (WITH JUST A FEW MILLION YEARS LEFT).

**CLASS F YELLOW-WHITE:** SIMILAR TO OUR SUN, BUT LARGER AND HOTTER. THIS IS A GOOD CHOICE FOR INHABITABLE PLANETS.

**CLASS G YELLOW:** OUR SUN IS CLASS G. THIS IS A GOOD CHOICE FOR INHABITABLE PLANETS.

**CLASS K ORANGE:** SIMILAR TO OUR SUN, BUT SMALLER AND COOLER. THIS IS A GOOD CHOICE FOR INHABITABLE PLANETS.

**CLASS M RED DWARF:** 3/4 OF ALL STARS ARE CLASS M. ALL BUT THE SMALLEST CAN HAVE INHABITABLE PLANETS. RED DWARFS HAVE BIG SOLAR FLARES THAT CREATE A NAVIGATIONAL HAZARD: THE SMALLER THE DWARF THE BIGGER THE SOLAR FLARES.

**TYPE VI SUBDWARF:** SIMILAR TO CLASS K ORANGE STARS, THEY ARE SMALLER THAN OUR SUN BUT LARGER AND HOTTER THAN RED DWARFS. THIS IS A GOOD CHOICE FOR INHABITABLE PLANETS.

**TYPE VII WHITE DWARF:** THIS IS THE LOW-WATTAGE REMNANT AFTER A STAR GOES RED-GIANT AND BURNS UP ITS INNER SOLAR SYSTEM. SOMETIMES THE FADING RED GIANT LEAVES A DEBRIS DISK, WHICH CAN FORM PLANETS.

**BLACK DWARF:** WHEN AN ANCIENT WHITE DWARF USES UP ALL ITS REMAINING FUEL, IT FADES COMPLETELY.

**BROWN DWARF:** A STAR THAT IS TOO SMALL TO BURN PROPERLY. NO INHABITABLE PLANETS.

**NEUTRON STAR:** WHEN A BIG STAR GOES SUPERNOVA, THE REMAINDER COLLAPSES INTO A TINY NEUTRON STAR. NEUTRON STARS EMIT MOSTLY X-RAYS. NO HABITABLE PLANETS.

**PULSAR:** A RAPIDLY SPINNING NEUTRON STAR.

**BLACK HOLE:** WHEN A REALLY BIG STAR GOES SUPERNOVA, THE REMAINDER COLLAPSES OUT OF EXISTENCE. THE BLACK HOLE REMAINS AS AN INVISIBLE NAVIGATIONAL HAZARD.

### **Binaries and multi-star systems**

**CLOSE BINARIES** ARE STARS THAT ORBIT EACH OTHER CLOSELY. THEY CAN HAVE PLANETS ORBITING AROUND THE PAIR OF STARS, AS LONG AS THE PLANETS ARE NOT TOO CLOSE TO THE STARS.

**DISTANT BINARIES** ARE STARS THAT ORBIT EACH OTHER AT A GREAT DISTANCE. THEY CAN EACH HAVE THEIR OWN SOLAR SYSTEM, AS LONG AS THE PLANETS DO NOT GET TOO CLOSE TO THE OTHER STAR. SOME BINARIES AND MULTI-STAR SYSTEMS DO NOT HAVE A STABLE HABITABLE ZONE.

### **Making up stars**

SOMETIMES YOU HAVE TO MAKE AN ADVENTURE ON SHORT NOTICE AND DO NOT HAVE TIME TO PICK THE STAR OR STARS WHERE THINGS TAKE PLACE.

IF YOU MAKE UP A STAR SYSTEM, MAKE IT BOTH DIM AND DISTANT. OUR ASTRONOMERS DO NOT THOROUGHLY CATALOG STARS CLASS G AND DIMMER MORE THAN 50 LIGHT-YEARS AWAY; A CLASS M RED DWARF CAN WORK CLOSER THAN THAT. BE SURE TO SAY WHAT CONSTELLATION IT IS IN AND GIVE ITS DISTANCE TO ONE OR MORE KEY DESTINATION (LIKE EARTH). GIVE IT A GENERIC SOUNDING NAME, LIKE GEORGES STAR OR LUMINA.

### **Matching stars with alien empires**

WHEN THE CHARACTERS MUST DEAL WITH AN ALIEN EMPIRE, ONE OF TWO QUESTIONS QUICKLY COMES UP:

- THIS IS THE STAR WHERE THE ADVENTURE TAKES PLACE; WHICH ALIEN EMPIRE SHOULD I USE?
- THIS IS THE ALIEN EMPIRE THEY WILL FACE; WHICH STAR SHOULD I PUT THE ADVENTURE ON?

THE ANSWER LIES IN A HANDY CONSTELLATION MAP. IT IS A MAP OF THE SKY WITH ALL THE CONSTELLATIONS LABELED (TWO ARE INCLUDED: **RR\_Constellations**). EACH EMPIRE LISTED IN THE DETAILS ABOUT ALIENS (**RR\_Alien\_details**) HAS A LOCATION, THE CONSTELLATION THE ALIEN EMPIRE COMES OUT OF.

- GOT A STAR AND NEED AN EMPIRE TO BOTHER IT? WHAT CONSTELLATION IS THE STAR IN? FIND THE CLOSEST CONSTELLATION ON THE STAR MAP THAT CONTAINS AN ALIEN EMPIRE.
- GOT AN EMPIRE TO USE AS AN ANTAGONIST AND NEED A STAR? PICK A STAR IN OR NEAR THE ALIENS CONSTELLATION. ANY ADJACENT CONSTELLATION WILL BE OFTEN BE FINE.

### **Stars thought to have planets in the habitable zone**

THIS LIST OF STARS WITHIN 75 LIGHT-YEARS OF EARTH IS CONSTANTLY EXPANDING, CHECK THE INTERNET IF YOU WANT MORE STARS OR MORE DETAIL.

THE PLANET MAY BE HIGH GRAVITY OR LOW GRAVITY. IF THE PLANET IS TOO BIG, GIVE IT A HABITABLE MOON.

Trappist	Gliese 832	Luyten
Proxima Centauri	Gliese 667	HD 40307
82 G. Eridani	Ross 128	Tau Ceti
LHS 1140	Ross 508	Gliese 1002
Wolf 1069	HD 48 948	L98-59

