

Star Frontiers 2000

A SF Community Project (Andy Campbell, Craig Cavalieri, Roy Crisman, Tim Carrier, Albin Johnson, Brad McMillan, Timothy Norris, Layne Saltern, Troy Terrell, Clark Valentine, Vandi Williams & others)

SF2000 is an attempt to fuse the best parts of Alpha Dawn and Zebulon's Guide into one system for use in the Star Frontiers game. Wherever possible, we have tried to keep the new system close to the old systems and made the changes simple. The major changes that you'll see in SF2000 are: use of all skills from Zebulon's Guide, including a listing of optional new skills; conversion of all skills to an attribute-based system, a la the Alpha Dawn combat model; conversion of all Knight Hawks skills to mesh with the SF2000 system; overhauling professions to allow for Alpha Dawn/Zebulon's Guide/unique tailoring of individual characters; and a tier system for determining adventure difficulty and character creation.

Document Change Record

Date	Change
1/10/01	complete overhaul of original SF2000 document. New standard.

Table of Contents

Section I. Generating a Character	7
Ability Scores	7
Experience Level.....	8
Section II. Professions and Skills	11
Four Professions from Zebulon's Guide.....	11
Enforcer (Military in AD).....	11
Techex (Technological in AD).....	12
Scispec (Biosocial in AD).....	12
Explorer (Biosocial in AD).....	13
General Category (Individual PSA).....	13
Optional Profession : Mentalists	13
Mentalist (Optional).....	14
Optional Profession: Spacer.....	15
Spacer (formerly Knight Hawks).....	15
Optional Individual PSAs	16
Section III. Library of Optional New Skills	17
Academics	17
Acrobatics.....	17
Adroitness.....	17
Alertness.....	17
Analyze Business System	18
Analyze Social System	18
Astrogation: Chart New Routes	18
Astrogation: Find Location.....	18
Astrogation: Plot Interstellar Jumps	18
Astrogation: Risk Jumping	18
Astronomy	19
Astrophysics	19
Ballistics	19
Blind-Fighting.....	19
Cartography	19
Computers: Software Engineer	20
Crossfire	20
Defenses: Repair	20
Diplomacy	21
Dirty Fighting	21
Economics	21
Engineer: Damage Control	21
Engineer: Electrical	21
Engineer: Ship Design.....	22
Engineer: Stress Analysis	22
Escape Artistry.....	22
Etiquette.....	22
Fine Arts.....	22
Gambling.....	23
General Lore	23
Gunnery: Beam Weapons	23

Gunnery: Rocket Weapons	23
Gunnery: Selective Targeting	24
Interrogation.....	24
Investigation	24
Iron Will	24
Languages I.....	25
Languages II	25
Lip Reading	26
Locale Familiarity	26
Management.....	27
Mathematics.....	27
Occult Knowledge.....	27
Off-hand firing.....	27
Recreation.....	27
Personality Restructuring.....	27
Pick Pockets.....	28
Psychotherapy.....	28
Sensor Ops.....	28
Ship Onboard Systems Operations (SOSO).....	28
Silent Kill.....	29
Stage Magic	29
Star Pilot 1	29
Star Pilot 2 (4-8).....	30
Star Pilot 3 (Hull size 9-12)	30
Star Pilot 4 (Hull size 13+)	30
Star Pilot : Evasion.....	30
Star Pilot: Increase Accuracy of Forward Firing Weapons.....	30
Star Pilot: Increase Maneuver Rating	31
Style Analysis	31
Swimming.....	31
Surveillance	31
Trade	31
Toxicology.....	32
Underclass	32
Underwater Operations.....	32
Vehicles: Space.....	32
Vehicles: Stunt Driving	32
Ventriloquism	33
Weapons: Mass Destruction.....	33
Weightless Combat.....	33
Section IV. Comprehensive Reference List for All Skills	35

Section I. Generating a Character

The processes in this section are a revised method of character creation based on the *Alpha Dawn* and *Zebulon's Guide to Frontier Space* methods. First, you generate and modify your character's ability scores. Then, based upon on the starting level of the campaign (Beginner, Intermediate, etc.), you determine the number of experience points you have along with your character's starting wealth.

Ability Scores

1. Roll d100 once for each ability pair (strength/stamina; dexterity/reaction speed; intuition/logic; personality/leadership). Table 1. Ability Scores shows how to convert your d100 rolls to base scores for each ability pair.

Table 1. Ability Scores

Roll	01-10	11-20	21-35	36-55	56-70	71-80	81-90	91-95	96-00
Ability Score	30	35	40	45	50	55	60	65	70

2. Decide your character's race. Add or subtract the appropriate modifiers as specified by Table 2. Ability Modifiers.

Table 2. Ability Modifiers

Race	STR/STA	DEX/RS	INT/LOG	PER/LDR
Dralasite	+5	-5	—	—
Human	—	—	—	—
Humma	+10	—	—	-10
Ifshnit	-5	—	+5	—
Osakar	+5	+5	—	-10
Saurian	+10	-10	—	—
S'Sessu	—	—	+10	-10
Vrusk	-5	+5	—	—
Yazirian	-10	+5	+5	—
Zethra	-5	+5	+5	-5

3. Fill in your race special abilities if you have them.
4. You can modify your base pair scores by subtracting points from one ability and adding them to the other ability in the base pair. No more than ten points per pair can be shifted this way.
5. Divide your character's Reaction Speed score by ten. If the result is a fraction, round it up. The final result is the character's initiative modifier.
6. Choose your handedness if you're not a Vrusk (Vrusk are ambidextrous) or a Dralosite (although you must designate a "dominant" limb).
7. Determine your punching score based on Table 3. Punching Scores.

Table 3. Punching Scores

Strength Score	1-20	21-40	41-60	61-80	81-00
Points of Damage	1	2	3	4	5

8. Determine your gender unless you are:
 - Osakar (who are always considered female),
 - Dralosite (who are female at one point, neuter at another, and male at another—choose which one you start at),
 - Zethra (who are hermaphroditic), or
 - Humma (who are female until they have their first child, then turn male until old age at which point they become neuter—choose which one you start at).

Experience Level

The Star Frontiers rules sets (Alpha Dawn Basic and Expanded Rules Sets, Zebulon’s Guide rules) assume that a referee will be starting his campaign with relatively inexperienced PCs just beginning their careers on the Frontier. While this was adequate when the Star Frontiers game was released, it provided little direction for longtime players and for referees designing experienced NPCs for their players to interact with.

However, like its TSR relative, the original D&D game, Star Frontiers needs a system for measuring PC, NPC, and “monster” (i.e., animal or alien) strengths. In the D&D/AD&D system, this was accomplished by the interlocking systems of experience points, class levels, and monster hit dice (with other refinements not related to this discussion). Star Frontiers provided for experience points as a means of improving characters, but provided no counterparts to the other “legs” of the D&D/AD&D system when designing NPCs and encounters. This was partly due to systemic differences between Star Frontiers and AD&D (i.e., no XPs awarded for killing opponents or looting treasure) and differences between the fantasy and sci-fi genres themselves. Nonetheless, there is no reason why a consistent XP/NPC design system can’t be added to the Star Frontiers rules framework. Table 4. Character Tiers is such a system.

Table 4. Character Tiers

Character Level	Experience Points	Equivalents	Starting Money
Initial Character Creation	400 XPs to be used for abilities, skills, & racial abilities	Use normal AD/Zeb’s creation methods	AD/Zeb’s method
Beginner	400-460 XPs	0-60 XPs or 0-4 adventures completed	1d100 + 250 credits
Intermediate	461-520 XPs	61-120 XPs or 4-8 adventures	2d100 + 1000 credits
Advanced	521-580 XPs	121-180 XPs or 8-12 adventures	3d100 + 2000 credits
Veteran	581+ total XPs	181+ XPs or 12+ adventures	4d100 + 3000 credits

Referees starting a group of characters at a campaign level higher than Initial Character Creation can either use the 400 base XP used for ability scores or ignore it, requiring the players to roll for their actual ability scores. Any XP above 400 listed at each level (as indicated in the “equivalents” column) is the amount used for improving the ability scores, racial abilities, and learning skills.

Beginning funds for characters is up to the individual referee, of course, but starting money guidelines are provided in the character creation table.

Once your referee has informed you at what level of a campaign you’re starting at, you can then move on to picking a profession and skills. Skill costs in SF2000 are a combination of the AD and Zeb’s system with skill progression being slightly easier than in both systems due to the large volume of skills. See Table 5. Skill Costs for skill costs.

Table 5. Skill Costs

Skill Level	XP Cost (within PSAs)	XP Cost (outside PSAs)
1	1	2
2	2	4
3	3	6
4	4	8
5	5	10
6	6	12

Section II. Professions and Skills

The revised skill system combines the Primary Skill Areas (PSA) from Alpha Dawn Expanded Rules with the Professions of Zebulon's Guide. Professions describe the field of work a character engages in, while PSAs describe clusters of related skills for which a character has a certain knack or aptitude. There are four traditional professions (Enforcer, Techex, Explorer, Scispec) and several new professions and PSAs (Spacer, Mentalist, Administrator, Counselor, Investigator, Rogue). Each profession has three or four PSAs associated with it, representing skills that are typically associated with that profession.

When creating characters, choose a profession and three PSAs. You can customize your character by choosing ANY three PSAs: all three from the character's profession, two from the profession and one from another, or all three from different professions. If your character has at least two PSAs from one profession, then he or she receives the automatic bonus skill associated with that profession. Otherwise, no bonus skill is awarded, and the character has no concrete profession to speak of.

Characters start out with 20 XP instead of the 10 listed in Zebulon's Guide. All skills listed within the character's three PSAs are available for learning at in-profession cost. All optional skills listed under each profession are available at in-profession cost at the referee's discretion. All other skills are considered to be out-of-profession in terms of cost. See Table 5. Skill Costs for the cost scale.

Four Professions from Zebulon's Guide

Optional skills listed after each profession are presented here as guides for referees in determining likely professional areas that the optional skills detailed later in this document would pertain to. As always, using these skills and figuring out where they might fit into a campaign is at the referee's own discretion.

Enforcer (Military in AD)

PSAs: Combat Specialist, Special Operations, Security Specialist

Automatic skill for choosing at least 2 Enforcer PSAs: Endurance

Combat Specialist

Body Speak
Pumping Federanium
Running
Weapons: Beam Weapons
Weapons: Demolitions
Weapons: Grenades
Weapons: Martial Arts
Weapons: Melee Weapons
Weapons: Missiles
Weapons: P.G.S. Weapons
Weapons: Powered Assault Armor
Vehicles: Cars

Special Operations

Body Speak
Camouflage
Concealment
Forgery: Forge
Vehicles: Aquatic
Vehicles: Atmospheric
Vehicles: Cars
Vehicles: Cycles
Weapons: Demolitions
Weapons: Missiles
Weapons: P.G.S. Weapons
Weapons: Repair

Security Specialist

Body Speak
Communication Devices: Operate
Cryptography
Forgery – Detect
Law
Photography
Robotics: Activate/Deactivate
Security Systems: Activate & Operate
Security Systems: Deactivate
Security Systems: Detect
Security Systems: Open Locks
Vehicles: Transports

Optional skills to consider: *Ballistics, Blind-Fighting, Crossfire, Dirty Fighting, Interrogation, Investigation, Off-hand firing, Style Analysis, Surveillance, Toxicology, Vehicles: Stunt Driving, Weapons: Mass Destruction*

Techex (Technological in AD)

PSAs: Engineer, Robotacist, Technician

Automatic skill for choosing at least 2 Techex PSAs: Agility

Engineer

Acoustics
Chemistry
Computers: Access & Operate
Engineer: Alternate Energy
Engineer: Architectural
Engineer: Civil
Engineer: Hydraulic
Engineer: Mechanical
Engineer: Military
Engineer: Nuclear
Optics
Physics

Robotacist

Computers: Access & Operate
Robotics: Activate/Deactivate
Robotics: Alter Functions
Robotics: Alter Mission
Robotics: Identification
Robotics: List Functions
Robotics: Modifications
Robotics: Remove Security Locks
Robotics: Repair
Robotics: Robopsychologist
Power Read
Vehicles: Machinery

Technician

Communication Devices: Operate
Communication Devices: Repair
Computers: Repair Mainframe
Computers: Repair Bodycomp
Computers: Repair Specialized
Machinery: Operate
Machinery: Repair
Power Read
Vehicles: Machinery
Vehicles: Repair
Vehicles: Transports
Weapons: Repair

Optional Skills to consider: *Astrophysics, Defenses: Repair, Engineer: Electrical, Mathematics, Matter Transferal Devices*

Scispec (Biosocial in AD)

PSAs: Computer Specialist, Scientist, Physician

Automatic skill for choosing at least 2 Scispec PSAs: Intelligence

Computer Specialist

Computers: Access & Operate
Computers: Bypass Security
Computers: Defeat Security
Computers: Display Information
Computers: Interface
Computers: Program Manipulation
Computers: Program Writing
Computers: Program Bodycomp
Computers: Repair Bodycomp
Computers: Repair Mainframe
Computers: Repair Specialized
Power Read

Scientist

Acoustics
Biology
Bionics
Botany
Chemistry
Cybernetics
Exobiology
Forensic Medicine
Genetics
Optics
Physics
Zoology

Physician

Medical Devices
Medical Diagnosis
Medical Treatment: Disease
Medical Treatment: Infection
Medical Treatment: Infestation
Medical Treatment: Miscellaneous
Medical Treatment: Poison
Medical Treatment: Radiation
Medical Treatment: Wounds I
Medical Treatment: Wounds II
Medical Treatment: Wounds III
Medical Treatment: Wounds IV

Optional Skills to consider: *Academics, Astronomy, Astrophysics, Cartography, Computers: Software Engineer, Mathematics, Personality Restructuring, Psychotherapy, Toxicology*

Explorer (Biosocial in AD)

PSAs: Wilderness Expert, Diplomat, System Specialist

Automatic skill for choosing at least 2 Explorer PSAs: Charisma

Wilderness Expert

Analyze Animal Behavior
Animal Taming
Animal Training
Climbing
Find Directions
Making Items/Structures
Medical Treatment: Veterinary
Ride Mount
Stable Mounts
Stealth
Survival
Tracking

Diplomat

Appraisal
Bluff
Communication
Communication Devices: Operate
Dramatics
Disguise
Empathic Understanding
Haggling
Persuasion
Politics
Society
Stealth

System Specialist

Analyze Ecosystems
Archaeology
Biology
Botany
Empathic Understanding
Gemology
Genetics
Geology
Geophysics
Psycho-Pathology
Theology
Zoology

Optional Skills to consider: *Academics, Alertness, Blind-Fighting, Cartography, Diplomacy, Dirty Fighting, Locale Familiarity, Silent Kill, Swimming, Surveillance, Underclass, Underwater Operations*

General Category (Individual PSA)

Skill Name

Chef
Dramatics
Entertaining
Finance
Gemology
Photography
Politics
Power Read
Pumping Federanium
Society
Running
Theology

Optional skills to consider: *Academics, Acrobatics, Alertness, Escape Artistry, Etiquette, Fine Arts, Gambling, General Lore, Iron Will, Languages I, Languages II, Lip Reading, Locale Familiarity, Occult Knowledge, Off-Hand Firing, Pick Pockets, Recreation, Sensor Ops, SOSO, Stage Magic, Swimming, Trade, Underclass, Vehicles: Stunt Driving, Ventriloquism*

Optional Profession : Mentalists

Mentalist is an optional path for character creation that retains some of the original features from Zebulon's Guide, but with some overhauling of the system. The major changes are outlined below:

Characters must have 75 Logic or higher to create a Mentalist character. During character creation, Mentalists can choose all four Mentalist PSAs or two Mentalist PSAs and one outside PSA. Mentalists who choose the "2 Mentalist, 1 Outside PSA" method can still choose skills from the other two Mentalist PSAs but only at out-of-

profession cost. Mentalists who choose the “all 4 Mentalist PSAs” method can choose skills outside the Mentalist PSA, but only at out-of-profession cost.

Enlightened characters choose one PSA from the Mentalist profession and two PSAs from other areas. They can never learn any Mentalist skills from the other three Mentalist PSAs, but they can use XPs normally to pick skills and raise levels from their chosen Mentalist PSA. Enlightened characters, like Mentalists, must have a Logic score at character creation of 75 or higher.

All other characters can never choose Mentalist skills.

Mentalist (Optional)

PSA’s: Psychoenergist, Psychomaterialist, Empath, Telepath

Psychoenergist (“Generator”)	Psychomaterialist (“Manipulator”)	Empath (“Sensitive”)	Telepath (“Dominator”)
Channeling I	Density	Analysis I	Beam
Channeling II	Disruption	Analysis II	Confusion
Cryokinesis	Heal Others	Clairaudience	Detection
Electrascreen	Heal Self	Clairvoyance	Fear
Infrascreen	Heal Self Fully	Empathy	Illusion
Levitation	Telekinesis	File	Infatuation
Pyrokinesis	Telemanipulation	Telepathy: Aliens	Link
Static	Teleportation: Limited	Telepathy: Animals	Paralyze
Truesight	Teleportation: Unlimited	Telepathy: Character	Shield
	Trance I	Timeread	Suggestion
	Trance II		Trap

(Note: the second name in parentheses is the slang term for such a specialist.)

Optional Profession: Spacer

Spacer (formerly Knight Hawks)

PSAs: Pilot, Engineer, Astrogator, Gunnery

Spacers can pick up to three of the four PSAs when choosing this profession. Automatic skill for choosing at least 2

Spacer PSAs: Adroitness

Pilot

Communication Devices: Operate
Computers: Access & Operate
Physics
Sensor Ops
SOSO
Star Pilot I
Star Pilot II
Star Pilot III
Star Pilot IV
Star Pilot: Evasion
Star Pilot: Increase Accuracy of FF Weapons
Star Pilot: Increase Maneuver Rating
Survival: Zero G
Vehicles: Space
Weightless Combat

Engineer

Computers: Access & Operate
Engineer: Nuclear
Engineer: Hydraulic
Engineer: Mechanical
Engineering: Damage Control
Engineering: Ship Design
Engineering: Stress Analysis
Machinery: Operate
Machinery: Repair
Power Read
Sensor Ops
SOSO
Survival: Zero G
Vehicles: Space
Weightless Combat

Astrogator

Astrogation: Chart New Routes
Astrogation: Find Location
Astrogation: Plot Interstellar Jumps
Astrogation: Risk Jumping
Astronomy
Astrophysics
Communication Devices: Operate
Computers: Access and Operate
Computers: Display Information
Optics
Sensor Ops
SOSO
Survival: Zero-G
Weightless Combat

Gunnery

Computers: Access & Operate
Gunnery: Beam Weapons
Gunnery: Rocket Weapons
Gunnery: Selective Targeting
Optics
Physics
Sensor Ops
SOSO
Survival: Zero-G
Weapons: Missiles
Weapons: PGS
Weapons: Beam
Weightless Combat
Weapons: Mass Destruction

Optional Individual PSAs

PSAs that are not associated with a profession are still valid categories of skills and are organized around themes (denoted by their titles). Characters may use any PSA as one of their three PSAs, but the following ones do not (in and of themselves) imbue the character with any automatic skills like professions do. Referees may use their discretion in allowing or modifying the PSAs offered here.

Administrator

Analyze social system
Analyze business system
Bluff
Communication
Diplomacy
Economics
Etiquette
Finance
Haggling
Management
Persuasion
Politics

Investigator

Ballistics
Cryptography
Forensic Medicine
Forgery: Detect
Interrogation
Investigation
Law
Locale Familiarity
Security Systems: Activate & Operate
Surveillance
Toxicology
Weapons: PGS Weapons

Counselor

Academics (Mental Healthcare)
Analyze Social Systems
Empathic Understanding
Hypnosis
Medical Devices
Medical Diagnosis
Personality Restructuring
Persuasion
Psychopathology
Psychotherapy
Theology
Robotics: Robopsychologist

Rogue

Appraisal
Bluff
Dirty Fighting
Disguise
Forgery: Detect & Perform
Gambling
Pick Pockets
Security Systems: Activate & Operate
Security Systems: Detect
Stealth
Underclass
Weapons: Melee

Section III. Library of Optional New Skills

Academics

(Brad McMillan)

Prerequisites: N/A

Description: This skill is a general category for all the academic skills not specifically mentioned in Star Frontiers. These are skills that a character might learn in some institute of higher learning, such as: Dralosite Literature; Philosophy; Media Production; Office Technology Systems; etc. The character knows the foundations of his area of study and only needs to make a skill check if some specific piece of uncommon information is called for or some particularly challenging action is required. Some examples of this skill include: Anthropology (in-depth cultural knowledge; gives +10% to skill checks when taken with archaeology), Economics (explained below), Linguistics (useful for deciphering alien or ancient languages), Literature, and Mathematics (explained below).

Acrobatics

(Troy Terrell)

Prerequisites: None

Description: This skill involves all the various activities associated with circus acrobats, including: trapeze, tight-rope, jumping & flipping, and other such acts. In combat situations, the skill can make the character a more difficult target to hit, due to the unexpectedly quick movements accomplished by a trained acrobat. With a successful skill check in melee, the character gains the defending bonus (-15 to attacker's chance to hit) without sacrificing her ability to counterattack. When dodging a ranged attack, the character can move at full speed on a successful skill check, ignoring the movement penalty of dodging as listed in the combat rules (the character has to be able to move and be aware of the ranged attack, however). The actual application of the skill in various circumstances is left to the referee's discretion.

Adroitness

(Albin Johnson)

Prerequisites: None (professional skill)

Description: This is the automatic skill for Spacers, essentially allowing them to operate efficiently in hypo-/hyper-gravity or acceleration situations. Spacer characters get an additional 7 points to be distributed between their Logic and Dexterity scores, reflecting the experience they gained studying sophisticated systems in a weightless environment.

Alertness

(Brad McMillan)

Prerequisites: N/A

Description: This skill makes an individual less likely to be surprised and more aware of his general surroundings. A character with this skill gets a +15% to his intuition roll for avoiding surprise. Also, the character may pick up on unusual environmental events (unusual quiet in the wilderness, a disturbed clearing, an unstable rock fall, etc.) at the referee's discretion.

Analyze Business System

(Roy Crisman)

Prerequisites: N/A

Description: This skill is used to identify and assess the inner workings of a business, including management, communications, worker attitudes, etc. Business consultation also falls under this heading. Successful application of this skill allows a character to recommend changes that can increase net profits by 10% x skill level. Benefits gained through a successful skill check last for six months. This special ability can only be applied to a business successfully once every six months.

Analyze Social System

(Roy Crisman)

Prerequisites: N/A

Description: This skill allows the user to analyze any sort of social system: social strata, religious organization, cult, sub-culture, native social unit, etc. This skill adds a +10% bonus to PER checks and other skills (such as diplomacy, bluff, haggling, etc.) in situations where the character has successfully analyzed a social system.

Astrogation: Chart New Routes

(Albin Johnson/Tim Carrier)

Prerequisites: Astrogation: Plot Interstellar Jumps

Description: see Knight Hawks.

Astrogation: Find Location

(Albin Johnson/Tim Carrier)

Prerequisites: Computers: Access and Operate 1, Optics 1, Physics 1

Description: see Knight Hawks.

Astrogation: Plot Interstellar Jumps

(Albin Johnson/Tim Carrier)

Prerequisites: Astrogation: Find Location

Description: see Knight Hawks.

Astrogation: Risk Jumping

(Albin Johnson/Tim Carrier)

Prerequisites: Astrogation: Plot Interstellar Jumps

Description: see Knights Hawks.

Astronomy

(SF module 2010)

Prerequisites: Optics 1, Astrophysics 1, Mathematics 1, Physics 2

Description: Characters with this skill study galaxies, stars, planets, moons, asteroids, comets, and meteors. The skill requires at least one of the following pieces of equipment: telescopes, radar, energy sensors, cameras, and computers. Each piece of equipment astronomers use to make their observations adds +5% to their success rate.

Astronomers can identify objects in space, from planets to space vessels. Identifying takes a half-hour for objects closer than 10,000 km, 1 hour for objects further away. Astronomers can also calculate the age, speed, mass or orbit (course) of any object in space. Astronomers can only make one calculation at a time, each calculation taking one half hour to complete.

Astrophysics

(Roy Crisman)

Prerequisites: Physics 2

Description: A character with this skill is schooled in the science of advanced astrophysics. This skill is a fundamental part of several other skills. It is used extensively in piloting in space, engineering, and astronavigation.

Ballistics

(Brad McMillan)

Prerequisites: N/A

Description: This skill gives a proficient character intimate knowledge of all standard Frontier weaponry (from primitive to modern). In addition, this skill allows a character that passes a successful skill check to determine what kind of weapon made a certain wound, left certain traces, etc. A successful skill check will also give a character general knowledge about more rare weaponry or alien technology (at the referee's discretion). For example, a character might be able to identify the energy signature of a Wartech specially produced collector's pistol or tell that an alien device is a proton weapon.

Blind-Fighting

(Brad McMillan)

Prerequisites: Weapons: Melee Weapons or Weapons: Martial Arts

Description: This skill allows an individual skilled in Weapons: Melee Weapons or Weapons: Martial Arts to ignore the "attacker disadvantaged" penalty when darkness or some other condition makes it difficult to see one's target. This skill need only be purchased once.

Cartography

(Troy Terrell)

Prerequisites: None

Description: This skill allows a character to accurately make maps of planetary surfaces, including maps at various scales (from global to local), and on various bases (from topographical to political). Also, it allows for the making of accurate undersea maps. In order to create a map, the character must have all necessary information in her

possession; in some cases, this will mean that the character must be able to observe the area in person (i.e. when making a map of an unexplored world or star system). Further, a character with this skill can correctly read any map, providing she knows the language in which it is labeled. When reading an existing map, the success rate is 100%. Sometimes it may be necessary to make a map without the assistance of computers or other technical devices. In such cases, a -20 modifier is applied to the skill check.

Computers: Software Engineer

(Clark Valentine)

Prerequisites: Computers: Access & Operate, Computers: Display Information, Computers: Program Manipulation, proper materials, tools (robcomkit), and facilities

Description: This skill revises the skills Computers: Program Writing and Computers: Program Bodycomp, as outlined in Zebulon's Guide. It is a very powerful skill for a computer expert, allowing the expert a chance to write a program to do virtually anything within the hardware capability of the machine running the program, instead of simply picking a type of program with each new level (as in the Alpha Dawn skill). It allows the engineer to evaluate the hardware capabilities of the computer, evaluate requirements of the software he wants to write, design the program, implement the code, and properly test it. This could require a great deal of time, depending on the purpose of the program—how much time is up to the referee, but keep in mind that the time required to properly engineer a program increases EXPONENTIALLY with the complexity of the program. Program creation requires certain material components, such as a computer suitable for software development, a compiler (or the Frontier equivalent), a debugger (or the Frontier equivalent), and time. However, a Software Engineer could potentially write software for mainframes, bodycomps, robots, security systems, or even more, if he also has other appropriate skills.

The referee should always make skill checks for this skill secretly, and just report success or failure in general terms (“It works, but you’re not confident in its reliability.” or “It works and you’re pretty sure it’s bulletproof.” or “After 10 hours, you just can’t seem to get it to work quite right, but you think you might if you spend more time working at it.”). This reflects the fact that no software engineer can ever be sure that his software is completely bug-free. (Programmer’s Creed, corollary 12: You will never find the last bug, and even if you do, you won’t know it.)

Crossfire

(Roy Crisman)

Prerequisites: Weapons skill of the type being used, proper set up of enemies, missing shots.

Description: This skill gives the character a chance to cause opponents to hit each other with shots fired at the character which miss.

Defenses: Repair

(Troy Terrell)

Prerequisites: None

Description: A character with this skill can repair and maintain all defensive equipment. Only reusable equipment can be completely repaired; suits are, by nature, destroyed as they are used but can be patched (50% effectiveness) with a successful skill check and proper materials. For example, Berm patches a battered skeinsuit. He passes a successful skill check and has restored the skeinsuit to full effectiveness (provides ½ protection versus inertia attacks). The skeinsuit can only take 25 points of ballistic damage before it is destroyed, though (and can’t be repaired again). All defensive repairs are made according to the **Standard Repair Rule**. In addition, this skill allows a character to apply armor paint to vehicles and structures.

Diplomacy

(Brad McMillan)

Prerequisites: Persuasion 1, Politics 1

Description: This skill allows a character proficient in it to negotiate on a grand scale (with corporations, governments, alien races, religious groups, powerful individuals, etc.). Setting up embassies, establishing treaties, negotiating trade, and arbitrating a cease-fire agreement are all examples of the kinds of activities a trained diplomat can engage in. The diplomat is considered skilled in all the fundamentals of negotiating and is assumed to have researched whatever diplomatic situations she might be engaged in beforehand. A skill check is required any time a tense situation arises in the diplomatic process or any time that a character hasn't had time to adequately prepare. This skill also provides a +10% modifier per level to skill checks during diplomatic interactions (PER checks, bluff, haggling, persuasion, etc., in the aforementioned settings).

Dirty Fighting

(Brad McMillan)

Prerequisites: Weapons: Melee or Weapons: Martial Arts

Description: The character skilled in dirty fighting is a master of street fighting. At the beginning of combat, the character can make a skill check against his dirty fighting ability to see if he can gain an advantage in combat. If the check is successful, the character gets the "attacker advantaged" bonus (+10%) for the duration of combat. It should be noted that some cultures or individuals consider dirty fighting to be cowardly or even taboo. In those situations, characters employing dirty fighting may find themselves being targeted in favor of other targets in combat.

Economics

(Roy Crisman)

Prerequisites: N/A

Description: This skill gives the character an understanding of economics, micro and macro. This skill is essential to those who wish a business to flourish and grow. This skill can also be used to modify the results of investment growth (+10% bonus to rolls). See "SF4: Mission to Alcazzar" for an example of an investments table.

Engineer: Damage Control

(Albin Johnson/Tim Carrier)

Prerequisites: Engineering: Mechanical 1, Engineering: Nuclear 1, Machinery: Operate 1, Machinery: Repair 1

Description: See Knight Hawks. In addition to explicit Knight Hawks rules, Damage Control allows an Engineer to affect every sort of repair to a damaged or malfunctioning system onboard a ship. This could be as minor as restoring lighting or power to a section of the ship, or as major as patching hull-breaches, repairing radiation leaks, and overhauling engines.

Engineer: Electrical

(Clark Valentine)

Prerequisites: Physics level 2, proper materials, tools, and facilities

Description: This skill gives the character a chance to design and build electrical devices not covered by other skills. The time, material, and financial requirements, along with the statistics of the device (use, energy usage, etc.),

are left to the referee. Note the useful potential of this skill combined with the skills: Computes: Software Engineer, the various Security Systems skills, Computers: Interface, the Robotics skills, Optics, etc.

Engineer: Ship Design

(Albin Johnson/Tim Carrier)

Prerequisites: Engineer: Hydraulic, Engineer: Mechanical, Engineer: Nuclear, Physics 1

Description: see Knight Hawks.

Engineer: Stress Analysis

(Albin Johnson/Tim Carrier)

Prerequisites: Engineer: Damage Control

Description: See Knight Hawks. In addition to the explicit Knight Hawks rules, Stress Analysis allows an Engineer to inspect a specific system of a ship and make an assessment of its chances of malfunctioning in the near future. This may be done following combat or just as a routine inspection. It cannot be done during combat. Minor systems take 1 hour to inspect, after which the roll is made; major systems take 1d10 hours. This subskill also covers the ability described in Knight Hawks pg. 13, in which an engineer can detect when an engine is about to fail from not being overhauled, and can do so in time to shut it down.

Escape Artistry

(Troy Terrell)

Prerequisites: None

Description: This skill is the art of thwarting various types of personal restraints (such as handcuffs and rope) by means of contorting the body and/or picking small locks. If the restraint system is secured by a complicated electronic locking mechanism, the use of Security Systems: Open Locks must be used in conjunction with this skill to gain release (in other words, the character must successfully pass an open locks check, then successfully pass an escape artistry check; as always, this is at the referee's discretion). The success rate may be adjusted up or down by the referee depending upon the complexity of the restraint and the availability of necessary tools.

Etiquette

(Brad McMillan)

Prerequisites: N/A

Description: This skill makes an individual proficient in all the social niceties associated with Frontier life. Dining out at an elegant restaurant, entertaining amongst the well-to-do, knowing what conversation to engage in in social circles, and being up on the latest fashions are all within the range of the character's experience. A skill check is required only when the character is thrust into an unusual situation (first contact with an alien species, being invited into a fairly secretive society, etc.). Characters with this skill gain a +10% to PER checks in the above-mentioned social situations.

Fine Arts

(Brad McMillan)

Prerequisites: N/A

Description: This skill is similar to the Zebulon's Guide skill of Entertaining except that it pertains to skill in one of the various fine arts (painting, holosculpture, poetry, etc.). Characters proficient in any fine art have a strong foundation in their area and some basic understanding of the other fine arts.

Gambling

(Brad McMillan)

Prerequisites: N/A

Description: Characters skilled in gambling are knowledgeable of the various games of chance in the Frontier. This skill works like the entertainment skill printed in Zebulon's Guide in that each time the character buys this skill she can specify which game of chance to be proficient in. The character is proficient enough in these games to be considered an expert. A successful skill check means the character gets a payoff (roll d100 and multiply this number times the character's bet. Alternately, a referee may develop their own games and rules). If the character fails, she loses her bet. If the character rolls a 98-00, she loses everything that she owns and may even be in trouble with the gambling establishment (referee's discretion).

General Lore

(Roy Crisman)

Prerequisites: N/A

Description: This skill covers in depth knowledge of any general area of knowledge (the more trivial the better!). An example of this would be sports trivia. Sports trivia experts would be familiar with all known general sporting events. Characters know not only rules and regulations, but also famous figures from the sport, histories of famous games and figures, training procedures, common illegalities concerning the sport, and common strategies. Characters taking this skill can opt to have general knowledge only, or to have an in-depth knowledge of certain areas (such as sports).

Gunnery: Beam Weapons

(Albin Johnson/Tim Carrier)

Prerequisites: Weapons: Beam 4

Description: See Knight Hawks. This skill subsumes "improve accuracy" and "selective targeting" under it. The skill chance (-5% x SL added to combat charts) assumes the "improve accuracy" component of this skill. Selective targeting subtracts -30% from the attack roll as per the skill description in Knight Hawks.

Gunnery: Rocket Weapons

(Albin Johnson/Tim Carrier)

Prerequisites: Weapons: Missiles 4

Description: See Knight Hawks. This skill subsumes "improve accuracy" and "selective targeting" under it. The skill chance (-5% x SL added to combat charts) assumes the "improve accuracy" component of this skill. Selective targeting subtracts -30% from the attack roll as per the skill description in Knight Hawks.

Gunnery: Selective Targeting

(Brad McMillan)

Prerequisites: Gunnery: Beam Weapons or Gunnery: Rocket Weapons

Description: See Knight Hawks. This skill must be purchased separately for Gunnery: Beam Weapons and Gunnery: Rocket Weapons.

Interrogation

(Brad McMillan/Albin Johnson)

Prerequisites: N/A

Description: Characters skilled in interrogation are knowledgeable of the many techniques and forms of interrogation. On a successful skill check, an interrogated character must make a ½ stamina check or confess some important information to the interrogator. PCs using interrogation can choose either non-invasive techniques (rigorous cross-examination, hypnosis, telol) or invasive techniques (torture, hard drugs) to extract information. Non-invasive techniques are resolved at normal success rates. Invasive techniques carry a +20% bonus to succeed but on every attempt the victim suffers 2d10 points wound damage and must subsequently pass a STA check or go into shock. Victims must be revived using Medical Treatment: Wounds 2 before proceeding. A character can attempt interrogation a number of times per day equal to his skill level. The exact methods of NPC interrogations are left to the imagination of the referee.

Investigation

(Clark Valentine)

Prerequisites: Law and Analyze Social Situation

Description: This skill allows the skilled character to know where and how to look for information pertaining to any sort of informal/formal investigation. For example, the character might know information about a society that the player does not—Taanik the Dralasite is trying to identify a murder suspect. Id knows that the suspect placed a call to the victim the night of the murder. With the Investigation skill, id might know (with a successful skill check) not only that the telecom company keeps those records, but where they keep them, and the most effective ways of sneaking a peek at them—even if the player playing Taanik doesn't know them (the referee would let her know Taanik's knowledge). Of course this skill can't be used to generate knowledge of things that aren't there; if there really is no way for Taanik to get a look at those records, a successful skill check would yield "Sorry, you just can't do it." Note that this skill may require an additional successful check of the skills, Politics, Theology, or even Underclass, depending on what the investigator is investigating—this is up to the referee's discretion.

Additionally, the character skilled in investigation has an in-depth knowledge of the tools of investigation, including the knowledge of legal and police networks, fingerprint analysis, DNA analyses, use of specialized databases, limited surveillance techniques, etc.

Iron Will

(Brad McMillan)

Prerequisites: N/A

Description: Iron Will is a skill by which the character learns various ways in which to fortify his mind against mental attacks. Psionic disciplines suffer a –10% penalty when used against the character if the character successfully passes a skill check and is actively trying to shield his mind. In addition, a character with Iron Will can

make a full Stamina check against interrogation if a skill check is passed. This skill is one non-Mentalist skill that Mentalists are allowed to specialize in.

Languages I

(Brad McMillan)

Prerequisites: N/A

Description: This skill allows characters to learn languages in addition to their native tongue and Pan-Gal. At 1-2 level, a character has a passable vocabulary and is able to speak the language reasonably well. Native speakers will recognize the individual as a foreigner, though. At 3-5 level, the character is fluent and may be able to hide her accent if attempting to pass herself off as a native (skill level check). At 6th level, the character can speak the language as expertly as a native speaker can.

Languages II

(Roy Crisman)

Prerequisites: N/A

Description: This is a more in-depth language skill for those players and referees who find Languages I to be too limited.

Table 6. Cost and Consequence of Language Skill Levels

Level	Cost	Comprehension	Notes
1	7	33%	Basic comprehension and vocabulary.
2	5	66%	Better understanding; increased vocabulary.
3	4	80%	Understanding of structure.
4	3	90%	Uses language correctly, but accent is still detectable.
5	3	100%	Native speaker.
6	4	100%	Studied the language/Expert

Languages come in 6 levels of mastery. The cost of language levels is unlike ordinary skills as the table indicates. The first level is more expensive because basic comprehension of a new language is not easily gained. From there, new levels cost less or the same as the previous level until advanced levels of the language are gained. A beginning character starts with level 2 in their racial language and level 2 in Pangal, with $15 + 2d10$ more points which may be used to purchase language levels. These points do not HAVE to be spent on language, and half of the $2d10$ can be used towards racial abilities. A character of a certain race may not be able to physically speak all languages.

Language Options: Racial languages listed most common first.

- Dralosite; High—This is the language in which Dralosite use to speak of intellectual topics. Dralosites learn both High and Common as a single language.
- Dralosite; Common—This is the base language in which a Dralosite uses to speak of mundane subjects.
- Human; Modern—The most common human language.
- Human; Sub-Cult—The language used by the fashion, legal, and illegal undergrounds.
- Human; Archaic—This is a virtually dead human language, somewhat like Latin.
- Human; Ancient—This is a dead Eastern equivalent.
- Humma
- Ifshnit

- Osakish—This language is so complex that so far, only Osakar have been able to speak it.
- Pangal—This language was created by PGC, which quickly became the most common language of all Frontier races.
- Saurian
- Vrusk
- Yazirian; Argonian—The official language of the Family of One.
- Yazirian; Gnarsh—Language of dissidents from the Family of One on Yast(Athor).

Proficient Languages: Certain languages are easy for other races to adapt to. These languages can be spoken by a race beyond 4th level. Dralasite is still only verbal; thus, an accent is detected when in person.

- Dralasite: Human, Ifshnit, Yazirian
- Human: Dralasite, Humma, Ifshnit, Yazirian
- Humma: Human, Yazirian
- Ifshnit: Human
- Osakar: All
- Yazirian: Human, Humma

Unspeakable Languages: Due to physical limitations, certain races are unable to replicate all of the sounds necessary for a language. The written form of a language is not limited by such constraints. Each race's limitations are:

- Dralasite: Osakish
- Human: Osakish
- Humma: Ifshnit, Osakish
- Ifshnit: Humma, Osakish
- Osakar: None
- Sathar: Able to speak Human, Yazirian, Pangal
- Saurian: Osakish
- Vrusk: Humma, Osakish
- Yazirian: Osakish

Lip Reading

(Brad McMillan)

Prerequisites: understanding of the language being spoken

Description: The character with this skill is able—on a successful skill check—to follow a spoken conversation by reading lips as long as he is within eyesight and the person is generally facing in his direction. Any conversation can be interpreted as long as the individual has some means of seeing the individual (using magnigoggles, seeing someone on a video camera, etc.) and he can understand the language being spoken.

Locale Familiarity

(Brad McMillan)

Prerequisites: N/A

Description: Characters who purchase this skill are versed in the geography, local politics, local customs, etc. of any area that they choose to specialize in (a city, culture, planet, system, etc.). The more limited the scope of the locale, the more intimately familiar the character is with the area (including individuals). The broader the area, the more generalized the knowledge.

Management

(Roy Crisman)

Prerequisites: N/A

Description: This skill gives the character the ability to manage others in some sort of business structure. It also gives the individual in-depth knowledge of management practices and theories. A character with this skill gains a +10% bonus to certain checks (persuasion, bluff, PER checks, etc.) when dealing with individuals in a business environment.

Mathematics

(Roy Crisman)

Prerequisites: N/A

Description: This skill allows a character to understand and use complex mathematics.

Occult Knowledge

(Brad McMillan)

Prerequisites: N/A

Description: Characters skilled in occult knowledge are aware of all of the various cults and cadres of the Frontier, understand Frontier mythology and supernatural beliefs, and are generally up-to-date on the bizarre and unusual. A skill check is required any time a character tries to dredge up knowledge of rare occurrences, tries to understand the supernatural beliefs of an alien culture, or any other similar instances.

Off-hand firing

(Brad McMillan)

Prerequisites: N/A

Description: Characters who purchase this skill ignore the penalties for using their non-primary hand in combat.

Recreation

(Brad McMillan)

Prerequisites: N/A

Description: This skill is identical to the Entertaining skill outlined in Zebulon's Guide, except it relates to indoor and outdoor recreational activities (billiards, table tennis, skiing, surfing, boating, skydiving, etc.).

Personality Restructuring

(Brad McMillan)

Prerequisites: Psychopathology 2, Psychotherapy 2, Interrogation 1, Hypnosis 2

Description: This skill allows an individual knowledgeable in the above-mentioned prerequisites to attempt to completely change an individual's personality. New personality traits, suggestions, or behavior patterns can be imprinted upon an individual given ample time and proper conditions (for example, hospital facilities and several weeks to months of work with a willing subject). Skilled individuals can attempt to subvert willing or unwilling

subjects and change behavioral patterns, imprint subliminal messages, condition phobias, obsessions, or compulsions, etc. in a number of hours equivalent to the person's intuition or logic (whichever is higher) divided by 10 (rounded up). This sort of brainwashing, however, is not without its flaws given the shortened time frame. Every standard day, a character is allowed a one-quarter LOG/INT check to recognize the tampering. Although the tampering cannot be fixed without further personality restructuring or intensive psychotherapy, the afflicted individual can fight off the effects of the brainwashing with a successful LOG/INT check

Pick Pockets

(Brad McMillan)

Prerequisites: N/A

Description: Pick Pockets allows the character to successfully steal from another individual, palm items, and generally pilfer small articles on a successful skill check. If the character knows what she is looking for and knows its location, a successful skill check is all that is required. A failed check means the object is not found or successfully lifted (and an opposing INT check of the target is called into play to see if the pilfering attempt is noticed). On a roll of 98-00, the character is automatically caught in the act. If the character does not know where the object is or just wishes to blindly search, the searched individual notices the attempt on any failed roll (no INT roll needed).

Psychotherapy

(Brad McMillan)

Prerequisites: Psychopathology 1

Description: This skill allows a character knowledgeable in psychopathology to treat individuals afflicted with mental illnesses. The individual is skilled in various treatment techniques and is aware of the latest developments and treatments in Frontier healthcare.

Sensor Ops

(Albin Johnson)

Prerequisites: Computers: Access and Operate 1

Description: A good skill to develop for non-spacers. Any character with this skill can read a ship's sensor readouts and be able to learn basic information about what is going on in or around the ship. Characters with certain skills can also use the ship's sensors to retrieve useful information pertinent to their area of knowledge. Specifically, engineers would be able to learn information on nearby ships, scispecs with the Geophysics skill could study a planet, astronomers could study stars, and so forth. This skill is required for characters trying to interpret information from atmoprobes and landing drones as described in Knight Hawks on page 22.

Ship Onboard Systems Operations (SOSO)

(Albin Johnson)

Prerequisites: Computers: Access & Operate 1, proper tools

Description: This skill introduces even the most inexperienced characters to the rudimentary operations aboard space vessels. With this skill a character can read a computerized analysis scanner attached to the life support system (c.a.s. panel), cycle an airlock, operate airlock hatches and pressure doors, use an intercom system, properly use a personnel rescue bubble in the event of ship decompression, and perform emergency repairs on damaged systems so

as to control the damage until an engineer can properly repair it. This may include closing off a broken pipe, putting out a fire, or switching off power to an area to prevent further damage. The referee should decide which repairs are simple enough to be within reach of this skill, and what further modifiers to apply. Jury-rigged repairs like this have a noncumulative 25% chance of breaking down each day, just like a yellow roll on the Standard Repair Rule. The necessary tools for the repairs are still required.

Another benefit of the SOSO skill is a general knowledge of the layout of space vessels and stations. Characters with this skill are familiar with the living/comfort aspects of starships. This skill is particularly useful in navigating unfamiliar spaceships/stations, ascertaining the location of rooms, holds, stores, and operations of key subsystems of a ship, including food processing, water recyclers, atmospheric scrubbers, etc. Once a character has toured a single ship or station, he does not need to roll for this skill when revisiting it. A negative modifier should be used on alien vessels, the degree of the modifier depending how alien the vessel is to the character. Veteran spacers often refer to newcomers as “SOSOs,” a moniker derived from this skill and referring to the newcomer’s inexperience around the space environment. For those tourists who take this skill alone and depend on it to cover all the circumstances in a space vessel, accidents frequently happen. It is not an exhaustive source of knowledge, although it is a staple skill for all rising spacers.

Silent Kill

(Brad McMillan)

Prerequisites: Weapons: Melee or Weapons: Martial Arts

Description: Silent Kill allows a character with the prerequisite weapons skills (Weapons: Melee or Martial Arts or Weapons: Beam, PGS, etc.) and proper equipment (such as silencers, flash muzzles and other specialty items) the chance to silently dispatch an adversary without raising an alarm. On a successful skill check (and a successful hit), the character’s attack goes unnoticed and unheard by anyone in the surrounding area. On a successful hit AND a second successful Silent Kill skill check (an 01-03 roll at first level), the character instantly kills her target. For each level of skill above first, the character adds 5 to her chance to instantly kill her target (i.e., 01-08 at second level, 01-13 at third level, etc.).

Stage Magic

(Brad McMillan)

Prerequisites: N/A

Description: This is the ability to perform large-scale illusions. A successful skill check means a character has seen a trick performed or read how it works, knows how the illusion is created, and can, given enough time and the proper equipment, recreate it. In addition, a successful skill check allows the character to perform simple illusions on the spur of the moment (sleight of hand tricks, card tricks, smoke & mirror variety ploys).

Star Pilot 1

(Albin Johnson/Tim Carrier)

Prerequisites: Computers: Access & Operate 1, Vehicles: Atmospheric 3

Description: This skill enables a Star Pilot to fly any spacecraft of hull size 3 or smaller. Excelling in this skill means the pilot is adept at maneuvering smaller, faster vessels as well as leaving and re-entering an atmosphere. Other skills include docking and refueling the ship. Ships that can operate within an atmosphere are controlled using the Vehicles: Atmospheric skill when in an atmosphere. Many Star Pilots specialize in this skill to become crack fighter pilots or operate smaller commercial or smuggling ships. The Star Piloting skills cover the expertise of operating a space vessel in complex maneuvers including docking, landing, and take-off from planets (not including

flying the vessel as an atmospheric craft), acceleration and deceleration, orbiting, evading missile fire, improving accuracy of forward-firing weapons, and improving the MR of a space-vessel in a Zero-G environment. By dividing the separate skills into the operation of progressive hull sizes, pilots could become very adept at flying a huge capital ship, which doubtless involves its own distinct considerations, but have little experience piloting a snub-fighter and vice-versa.

Star Pilot 2 (4-8)

(Albin Johnson/Tim Carrier)

Prerequisites: Star Pilot 1

Description: This skill specializes in the techniques necessary for piloting space craft with hull sizes ranging from 4 to 8. Excelling in this skill means the pilot is adept at maneuvering larger ships like frigates and destroyers.

Star Pilot 3 (Hull size 9-12)

(Albin Johnson/Tim Carrier)

Prerequisites: Star Pilot 2

Description: This skill specializes in the techniques necessary for piloting space craft with hull sizes ranging from 9 to 12. Other skills include docking and refueling the ship. Excelling in this skill means the pilot is adept at maneuvering even larger ships like assault transports and spaceliners.

Star Pilot 4 (Hull size 13+)

(Albin Johnson/Tim Carrier)

Prerequisites: Star Pilot 3

Description: This skill specializes in the techniques necessary for piloting spacecraft of hull size 13 or larger. Other skills include docking and refueling the ship. Characters at this level could become very adept at flying a huge capital ship, which doubtless involves its own distinct considerations.

Star Pilot : Evasion

(Albin Johnson/Tim Carrier)

Prerequisites: Star Pilot 1

Description: see Knight Hawks. This skill need only be purchased once for use on any starship the pilot has expertise in flying.

Star Pilot: Increase Accuracy of Forward Firing Weapons

(Albin Johnson/Tim Carrier)

Prerequisites: Star Pilot 1

Description: see Knight Hawks. This skill need only be purchased once for use on any starship the pilot has expertise in flying.

Star Pilot: Increase Maneuver Rating

(Albin Johnson/Tim Carrier)

Prerequisites: Star Pilot 1

Description: see Knight Hawks. This skill need only be purchased once for use on any starship the pilot has expertise in flying.

Style Analysis

(Brad McMillan)

Prerequisites: Weapons: Melee Weapons or Weapons: Martial Arts

Description: This skill allows an individual skilled in Weapons: Melee Weapons or Weapons: Martial Arts to gain a tactical advantage in melee combat by studying his opponent in battle for one round. The character cannot do anything other than observe his target during that round. At the end of the round, the character rolls a check against his SL. If successful, the character gains the “attacker advantaged” bonus against the target in Melee combat for the duration of the combat.

Swimming

(Brad McMillan)

Prerequisites: None

Description: A character with this skill is a proficient swimmer. As such, characters can double their race’s normal movement in the water. In addition, a skill check is required only in difficult circumstances (swimming in stormy seas, holding breath longer than usual, etc.). This skill does not allow a character to conduct any extended activities underwater, however (for that, a character needs the underwater operations skill). Be aware that characters without the swimming skill can still stay afloat and swim as indicated in the Alpha Dawn rules. They may not, however, be able to swim or stay afloat in anything other than favorable conditions.

Surveillance

(Brad McMillan)

Prerequisites: N/A

Description: Characters with this skill are capable of observing others at a distance, using a variety of electronic tools. The character can design, install, and monitor such equipment, as necessary. Characters skilled in surveillance have a ½ skill check success rate of being able to detect if they are under surveillance themselves if actively searching.

Trade

(Troy Terrell)

Prerequisites: None (Varies)

Description: This skill encompasses all of the various supporting professions that one can expect to find in civilized society. ‘Blue-collar’ professions (agriculture, masonry, cosmetology, etc.) usually require DEX as a main attribute, while ‘white collar’ professions (Teaching, Brewing, Interior Decorating, Fashion, etc.) usually require LOG/INT as main attributes. Exact details of each profession are left to the individual referee and player, but players are assumed to have specialized knowledge of their area of expertise as well as a basic knowledge of related disciplines. Some

examples of trades include: Agriculture, Construction, Fashion, and Teaching (a possible use of this skill might allow a teacher – on a successful skill check – to impart between 1-4 skill points to a student for application to skills the teacher is proficient in).

Toxicology

(Roy Crisman)

Prerequisites: Biology 1, Chemistry 1

Description: The user of this skill is well-versed in the various poisons of the Frontier, what's toxic to Frontier races, and is able to create various poisons from chemicals available to persons in technologically advanced cultures.

Underclass

(Brad McMillan)

Prerequisites: N/A

Description: This skill gives a character some specialized knowledge of the criminal activities in a certain locale (city, country, planet, system, etc.). The more limited the scope of the knowledge, the more information the character will have, including criminal contacts. The wider the range of criminal activity (for example, the activities of the Malthar in the Dramune System), the less specific information the character will have.

Underwater Operations

(Troy Terrell/Albin Johnson)

Prerequisites: Swimming

Description: A character with this skill can operate & maintain all forms of underwater equipment (excluding vehicles). This includes equipment for use at all depths, although some deep diving gear is complicated enough to call for a penalty to skill checks (referee's discretion).

Vehicles: Space

(Tim Carrier)

Prerequisites: Vehicles: Machine, Machinery: Operate (for cargo arms)

Description: This skill enables a spacer to operate any space vessel support vehicle such as a launch, workpod, or a cargo bay loader arm. It also familiarizes spacers with such EVA equipment as the rocket stake, EVA stick, magnetic grapple, external repair bay, clamp-on airlock (all described in Traveller's AD 2300 equipment guide), laser power torch, and anchors. In addition, characters with this skill get a +10 modifier to all Reaction Speed checks described in KH page 29 when using a rocket pack and receive only half damage from colliding with objects.

Vehicles: Stunt Driving

(Brad McMillan)

Prerequisites: any Vehicle skill

Description: This skill allows an individual to add 5% per level to his reaction speed roll when performing unusual or tricky maneuvers with whatever vehicles he is skilled in. This skill must be purchased separately for each vehicle the character wishes to specialize in.

Ventriloquism

(Brad McMillan)

Prerequisites: N/A

Description: This skill allows a proficient character to throw her voice, making sounds appear to originate from someone or something as much as 5 meters away. A failed check means the ventriloquism attempt didn't work—anybody listening knows where the sound came from. Even a successful ventriloquism attempt isn't foolproof: Suspicious listeners get a ½ Log check to see if they detect the deceit.

Weapons: Mass Destruction

(Brad McMillan)

Prerequisites: Computers: Access & Operate 1; Missiles 1; Beam Weapons 1; Demolitions 1; PGS Weapons 1; Security Systems: Deactivate 1

Description: This skill gives a character familiarity with the various large-scale military armaments of the Frontier (for example, nuclear missiles, biological and chemical warfare missiles, ground-based laser systems, SAM batteries, SSM (surface-to-space missile) and SSL (surface-to-space laser) systems, etc.). A successful skill check allows a character to operate these weapon systems (penalties should be adjusted for unusual or alien designs, of course). In general, referees should obviously not allow characters to own these sorts of weapon systems, as they are high-tech military weapons and highly guarded. Proficient characters can attempt to disarm a weapon on a successful roll minus the security lock level of the weapon.

Weightless Combat

(Roy Crisman)

Prerequisites: N/A

Description: Due to the lack of gravity, combat in a weightless environment becomes much more difficult. Because of recoil on some ranged weapons and the volatile nature of melee, characters require training to be effective in zero-gee combat. Characters with the Weightless Combat skill are only required to make a check to maintain control if they roll 98-00 or miss in melee combat. In ranged combat, characters with any level Weightless Combat skill are allowed to use their full weapon skill level, as opposed to ½ level. In melee combat, characters with the Weightless Combat skill are allowed to use the Weightless Combat skill level and ½ (round down) of their Melee or Martial Arts (if applicable) level up to the level of Weightless combat.

Section IV. Comprehensive Reference List for All Skills

Table 7. Canon Skills

Skill Name	Attribute	Source
Acoustics	½ Log +10% per level	ZG
Agility	professional (Dex/RS)	ZG
Analyze Animal Behavior	½ Int +10% per level	ZG
Analyze Ecosystems	½ Log + 10% per level	ZG
Animal Taming	½ Sta + 10% per level	ZG
Animal Training	½ Log/Int + 10% per level	ZG
Appraisal	½ Int + 10% per level	ZG
Archaeology	½ Log/Int + 10% per level	ZG
Biology	½ Log + 10% per level	ZG
Bionics	½ Log + 10% per level	ZG
Bluff	½ Per/Ldr +10% per level	ZG
Body Speak	100% (Log)	ZG
Botany	½ Log + 10% per level	ZG
Camouflage	½ Dex + 10% per level	ZG
Charisma	professional (Per/Ldr)	ZG
Chef	automatic (Log/Int)	ZG
Chemistry	½ Log + 10% per level	ZG
Climbing	automatic (Str or Dex)	ZG
Communication	½ Log/Int + 10% per level	ZG
Communication Devices: Operate	½ Log + 10% per level	ZG
Communication Devices: Repair	½ Log or Dex + 10% per level	ZG
Computers: Access & Operate	½ Log + 10% per level (-10% per COML)	ZG
Computers: Bypass Security	½ Int or Dex (manual) + 10% per level (-10% per MXPL)	ZG
Computers: Defeat Security	½ Log + 10% per level (-10% per MXPL)	ZG
Computers: Display Information	½ Log + 10% per level (-10% per COML)	ZG
Computers: Interface	½ Log + 10% per level (-10% per COML)	ZG

Skill Name	Attribute	Source
Computers: Program Bodycomp	½ Log + 10% per level	ZG
Computers: Program Manipulation	½ Log + 10% per level (-10% per MXPL)	ZG
Computers: Program Writing	special (Log)	ZG
Computers: Repair Bodycomp	½ Log or Dex + 10% per level	ZG
Computers: Repair Mainframe	½ Log or Dex + 10% per level (-10% per COML)	ZG
Computers: Repair Specialized	½ Log or Dex + 10% per level	ZG
Concealment	100% or ½ Dex +10% per level	ZG
Cryptography	½ Log + 10% per level	ZG
Cybernetics	½ Log + 10% per level	ZG
Disguise	½ Per +10% per level	ZG
Dramatics	½ Per +10% per level	ZG
Empathic Understanding	½ Int -10% per level	ZG
Endurance	professional (Str/Sta)	ZG
Engineer: Alternate Energy	½ Log + 10% per level	ZG
Engineer: Architectural	½ Log + 10% per level	ZG
Engineer: Civil	½ Log + 10% per level	ZG
Engineer: Hydraulic	½ Log + 10% per level	ZG
Engineer: Mechanical	½ Log + 10% per level	ZG
Engineer: Military	½ Log + 10% per level	ZG
Engineer: Nuclear	½ Log + 10% per level	ZG
Entertaining	special (Per)	ZG
Exobiology	½ Log + 10% per level	ZG
Finance	½ Log + 10% per level	ZG
Find Direction	½ Log/Int +10% per level	ZG
Forensic Medicine	100% or ½ Log +10% per level	ZG
Forgery: Detect	½ Int +10% per level	ZG
Forgery: Perform	½ Dex +10% per level	ZG
Gemology	½ Log + 10% per level	ZG
Genetics	½ Log + 10% per level	ZG
Geology	½ Log + 10% per level	ZG
Geophysics	½ Log + 10% per level	ZG
Haggling	½ Per +10% per level	ZG
Hypnosis	½ Per +10% per level	ZG

Skill Name	Attribute	Source
Intelligence	professional (Log/Int)	ZG
Law	½ Log + 10% per level	ZG
Machinery: Operate	½ Log + 10% per level	ZG
Machinery: Repair	½ Log or Dex + 10% per level	ZG
Making Items/Structures	automatic (Log)	ZG
Matter Transferal Devices	½ Log + 10% per level	ZG
Medical Devices	½ Log + 10% per level	ZG
Medical Diagnosis	½ Log/Int + 10% per level	ZG
Medical Treatment: Disease	½ Log/Int + 10% per level	ZG
Medical Treatment: Infection	½ Log/Int + 10% per level	ZG
Medical Treatment: Infestation	½ Log/Int + 10% per level	ZG
Medical Treatment: Miscellaneous	automatic (Log/Int)	ZG
Medical Treatment: Poison	½ Log/Int + 10% per level	ZG
Medical Treatment: Radiation	½ Log/Int + 10% per level	ZG
Medical Treatment: Veterinary	100% (Log/Int)	ZG
Medical Treatment: Wounds I	100% (Log/Int)	ZG
Medical Treatment: Wounds II	½ Dex + 10% per level	ZG
Medical Treatment: Wounds III	½ Dex + 10% per level	ZG
Medical Treatment: Wounds IV	½ Dex + 10% per level	ZG
Optics	½ Log + 10% per level	ZG
Persuasion	½ Per/Ldr +10% per level	ZG
Photography	½ Int +10% per level	ZG
Physics	½ Log +10% per level	ZG
Politics	½ Ldr +10% per level	ZG
Power Read	automatic (Log)	ZG
Psychopathology	½ Log/Int +10% per level	ZG
Pumping Federanium	automatic (Str)	ZG
Ride Mount	100% (RS)	ZG
Robotics: Activate/Deactivate	automatic (Log)	ZG
Robotics: Alter Functions	½ Log + 10% per level (-10% per ROBL)	ZG
Robotics: Alter Mission	½ Log + 10%per level (-10% per ROBL)	ZG

Skill Name	Attribute	Source
Robotics: Identification	100% -10% per ROBL (Log)	ZG
Robotics: List Functions	½ Log + 10% per level (-10% per ROBL)	ZG
Robotics: Modifications	½ Dex + 10% per level (-10% per ROBL)	ZG
Robotics: Remove Security Locks	½ Dex +10% per level (-10% per ROBL)	ZG
Robotics: Repair	½ Dex + 10% per level (-10% per ROBL)	ZG
Robotics: Robopsychologist	½ Int +10% per level	ZG
Running	automatic (Sta)	ZG
Security Systems: Activate and Operate	½ Log + 10% per level	ZG
Security Systems: Deactivate	½ Int + 10% per level (-10% per SECL)	ZG
Security Systems: Detect	½ Int + 10% per level (-10% per SECL)	ZG
Security Systems: Open Locks	½ Log or Dex + 10% per level (-10% per LOKL)	ZG
Society	½ Per/Ldr +10% per level	ZG
Stable Mounts	automatic (Dex or Log)	ZG
Stealth	½ Dex/RS +10% per level	ZG
Survival	½ Int or Sta +10% per level	ZG
Theology	½ Log + 10% per level	ZG
Tracking	½ Int +10% per level	ZG
Vehicles: Aquatic	100% (RS)	ZG
Vehicles: Atmospheric	100% (RS)	ZG
Vehicles: Cars	100% (RS)	ZG
Vehicles: Cycles	100% (RS)	ZG
Vehicles: Machinery	½ RS + 10% per level	ZG
Vehicles: Repair	½ Dex + 10% per level	ZG
Vehicles: Transports	100% (RS)	ZG
Weapons: Beam Weapons	½ Dex + 10% per level	ZG
Weapons: Demolitions	½ Dex + 10% per level	ZG
Weapons: Grenades	½ Dex + 10% per level	ZG
Weapons: Martial Arts	½ Dex (or Str) + 10% per level	ZG

Skill Name	Attribute	Source
Weapons: Melee Weapons	½ Dex (or Str) + 10% per level	ZG
Weapons: Missiles	½ Dex + 10% per level	ZG
Weapons: P.G.S. Weapons	½ Dex + 10% per level	ZG
Weapons: Powered Assault Armor	100% (Dex)	ZG
Weapons: Repair	½ Dex + 10% per level	ZG
Zoology	½ Log + 10% per level	ZG

Table 8. Mentalist Skills

Skill Name	Attribute	Source
Mentalist: Analysis I	½ Log/Int + 10% per level	ZG
Mentalist: Analysis II	½ Log/Int + 10% per level	ZG
Mentalist: Beam	½ Log + 10% per level	ZG
Mentalist: Channeling I	½ Log/Int + 10% per level	ZG
Mentalist: Channeling II	½ Log/Int + 10% per level	ZG
Mentalist: Clairaudience	½ Log/Int + 10% per level	ZG
Mentalist: Clairvoyance	½ Log/Int + 10% per level	ZG
Mentalist: Confusion	½ Ldr + 10% per level	ZG
Mentalist: Cryokinesis	½ Sta + 10% per level	ZG
Mentalist: Density	½ Sta + 10% per level	ZG
Mentalist: Detection	½ Log/Int + 10% per level	ZG
Mentalist: Disruption	½ Sta + 10% per level	ZG
Mentalist: Electrascreen	½ Log or Sta + 10% per level	ZG
Mentalist: Empathy	½ Log/Int + 10% per level	ZG
Mentalist: Fear	½ Ldr + 10% per level	ZG
Mentalist: File	100% (Log)	ZG
Mentalist: Heal Others	100% (Sta)	ZG
Mentalist: Heal Self	100% (Sta)	ZG
Mentalist: Heal Self Fully	½ Sta + 10% per level	ZG
Mentalist: Illusion	½ Ldr + 10% per level	ZG
Mentalist: Infatuation	½ Per + 10% per level	ZG
Mentalist: Infrascreeen	½ Log or Sta + 10% per level	ZG
Mentalist: Levitation	100% (Sta)	ZG
Mentalist: Link	½ Log + 10% per level	ZG
Mentalist: Paralyze	½ Sta + 10% per level	ZG
Mentalist: Pyrokinesis	½ Sta + 10% per level	ZG
Mentalist: Shield	automatic (Log or Sta)	ZG
Mentalist: Static	½ Log + 10% per level	ZG
Mentalist: Suggestion	½ Ldr + 10% per level	ZG
Mentalist: Telekinesis	½ Log or Sta + 10% per level	ZG
Mentalist: Telemanipulation	½ Log or Sta + 10% per level	ZG

Skill Name	Attribute	Source
Mentalist: Telepathy (Aliens)	½ Log/Int + 10% per level	ZG
Mentalist: Telepathy (Animals)	100% (Log/Int)	ZG
Mentalist: Telepathy (Characters)	100% or ½ Log/Int + 10% per level	ZG
Mentalist: Teleporation (Limited)	½ Log or Sta + 10% per level	ZG
Mentalist: Teleporation (Unlimited)	½ Log or Sta + 10% per level	ZG
Mentalist: Timeread	½ Log + 10% per level	ZG
Mentalist: Trance I	½ Log or Sta + 10% per level	ZG
Mentalist: Trance II	½ Log or Sta + 10% per level	ZG
Mentalist: Trap	100% (Log)	ZG
Mentalist: Truesight	½ Log/Int + 10% per level	ZG

Table 9. Knight Hawks Skills in SF2000

Skill Name	Attribute	Source
Astrogation: Chart New Routes	Log + 10% x SL - 5% x light years	KH
Astrogation: Find Location	½ Log + 10% per level	KH
Astrogation: Plot Interstellar Jumps	100% (see KH) (Log)	KH
Astrogation: Risk Jumping	1/2 Int + 5% x SL + 10% per hour	KH
Star Pilot: Pilot 1	½ RS + 10% per level	New
Star Pilot: Pilot 2	½ RS + 10% per level	New
Star Pilot: Pilot 3	½ RS + 10% per level	New
Star Pilot: Pilot 4	½ RS + 10% per level	New
Star Pilot: Evasion	- 3% x SL from ship's chance of being hit	KH
Star Pilot: Improve Accuracy of Forward Firing Weapons	+5% x SL	KH
Star Pilot: Increase Maneuver Rating	10% x SL	KH
Gunnery: Rocket Weapons	+5% x SL added to KH Combat Table %'s	KH
Gunnery: Beam Weapons	+5% x SL added to KH Combat Table %'s	KH
Gunnery: Selective Targeting	-30% to hit	KH
Engineering: Ship Design	100% (Log)	KH
Engineering: Damage Control	½ Int + 10% per level	KH
Engineering: Stress Analysis	-5% x SL (to ship's breakup %); trouble-shooting/detecting failing engine:Log/Int + 10% x SL	KH

Table 10. Optional Skills in SF2000

Skill Name	Attribute	Source
Academics	½ Log + 10% per level	New
Acrobatics	½ Dex/RS + 10% per level	New
Adroitness	professional (Log and Dex)	New
Alertness	automatic (Int)	New
Analyze Business Setting	½ Log + 10% per level	New
Analyze Social System	½ Log + 10% per level	New
Astronomy	½ Log + 10% per level	New
Astrophysics	½ Log + 10% per level	New
Ballistics	½ Log +10% per level	New
Blind-Fighting	automatic (Int or RS)	New
Cartography	½ Log +10% per level	New
Computers: Software Engineering	special (Log)	New
Crossfire	½ RS + 10% per level	New
Defenses: Repair	½ Dex +10% per level	New
Diplomacy	½ Per/Ldr +10% per level	New
Dirty Fighting	½ Dex or Str +10% per level	New
Economics	½ Log +10% per level	New
Engineer: Electrical	½ Log +10% per level	New
Escape Artistry	½ Dex +10% per level	New
Etiquette	automatic (Log or Per)	New
Fine Arts	special (Int)	New
Gambling	½ Int + 10% per level	New
General Lore	½ Log+10% per level	New
Interrogation	½ Per/Ldr +10% per level	New
Investigation	½ Log or Int +10% per level	New
Iron Will	automatic (Sta)	New
Languages I	½ Log + 10% per level	New
Languages II	see skills section	New
Lip Reading	½ Log + 10% per level	New
Locale Familiarity	special (Log)	New
Management	½ Per/Ldr +10% per level	New
Mathematics	½ Log + 10% per level	New
Occult Knowledge	½ Log/Int + 10% per level	New
Off-hand firing	automatic (Dex)	New
Personality Restructuring	½ Log/Int + 10% per level	New

Skill Name	Attribute	Source
Pick Pockets	½ Dex +10% per level	New
Psychotherapy	½ Log/Int +10% per level	New
Recreation	automatic (Dex)	New
Sensor Ops	automatic (Log)	New
Ship Onboard Systems Operation (SOSO)	10% x SL for ship/ station orientation (1/2 Log + 10% x SL for repair)	New
Silent Kill	special (Str or Dex)	New
Stage Magic	½ Dex/RS +10% per level	New
Style Analysis	½ Log/Int +10% per level	New
Swimming	½ Dex +10% per level	New
Surveillance	½ Log + 10% per level	New
Survival: Zero G	½ Int or Sta +10% per level	New
Trade	Varies	New
Toxicology	½ Log + 10% per level	New
Underclass	½ Per/Ldr +10% per level	New
Underwater Operations	½ Dex +10% per level	New
Vehicles: Space	100% (Dex)	New
Vehicles: Stunt Driving	½ Dex + 10% per level	New
Ventriloquism	½ Dex + 10% per level	New
Weapons: Mass Destruction	½ Dex (or Log)+ 10% per level (-10% per SECL for disarming)	New
Weightless Combat	special (Dex)	New