As in the previous books, I’ve made last-minute amending comments on the game, and here I am again. Throughout the text, we’ve been talking about the differences between the scenario’s socio-cultural situation and ours. Yes and no. As mentioned in the introduction to book 2, there is a lot of computers and access to data and computer supported systems, much of which, at least in the inner ConFed worlds, is open to the general public. In such an information-rich environment, combined with the generally high level of education, the population is exceptionally well-informed and active in the processes affecting the social and political situation.

However, this is not to say that everyone has the same opinions as to the what and hows, which ends up being a large part of what makes the action in the scenarios. But there’s more to all this than political intrigue, and that’s the hard part to describe: Like going overseas, then trying to explain the difference of the “feel” of the place. It’s easy to point out differences in details, favorite foods, election procedures, dress codes, but harder to get across the general living attitudes and how the local mind-set colors everything from day-to-day mundanities to momentous historical events. So, I’m kind of stuck presenting, in broad, general terms, what the real differences are between Erma’s worlds and our own (compounded by the fact that many common assumptions here in Seattle don’t work in Melbourne any better than they would in Tokyo, Hull, or Helsinki, or even Miami, Los Angeles, or New Haven). A large part of the difference in basic mind set to keep aware of is that the society has virtually no history, no body of traditions or cultural roots to base their day-to-day on.

Early on, individual conduct — and all the rules and assumptions that go with interpersonal action — was just simple golden rule, common sense type things. No one should go around hurting others, stealing personal items was a no-no, tossing people out airlocks without good cause was frowned upon, that sort of thing. Other details took into account many of their physiological characteristics. For example, among many of the species, sexual interest in the male comes about only after the female goes into estrus, and by sign or pheromones, makes it clear she’s interested. Such would make, say, simple nudity, much less provocative and sex-segregated toilet or bathing facilities unnecessary. On the other hand, sex discrimination in the work place can be a problem, unfairly assuming that females become unreliable and destructive while in season. Such concern is doubly unfair, considering that most species have at least some level of voluntary control of their sexual processes, and even in the midst of such a period, most have no obvious behavior changes and pheromones are easily masked. (The arguments are similar and as invalid as those against women and PMS behavior.) While on the subject, most females have some control of their fertility (as do some of the original species they are based on) and issues of birth control are left to the individual, though most of the planets encourage and vigorously support lots of offspring, as most developments and colonies are underpopulated.

Lacking religion, marriage takes the form of contracts in those states that need formal paperwork, while simply living together in various arrangements is common elsewhere. These arrangements often follow the species’ pre-sentient origins, like wolves collecting together large extended families which function much like their ancestral packs, or among horses, a single stallion collecting a harem of mares. There are also many “monogamous” families, though a new couple is more likely to share housing with parents or other family for mutual social support. The notion of newlyweds moving to the suburbs, putting distance between themselves and inlaws, is largely foreign, except in some colonial situations intent on population dispersal. Even without the institutionalized roles on who should or shouldn’t be doing what to whom, conspicuous promiscuity is not much of a problem. This is due, in large part, to the recognition of its socially disruptive potential; there is encouragement towards practical responsibility and, as necessary, a touch of psychological hygiene. In fact, most of what we would consider enforceable laws are handled as social guidelines, and infractions are considered behavior aberrations needing counseling or therapy rather than crimes to be punished. (The heated debate over the “source” of homosexuality precludes my comments on such.)

Serious crimes, especially those by dedicated criminals not previously discouraged by earlier intervention, are dealt with rather harshly. If, with examination, it’s shown that the individual can be rehabilitated after reconditioning (effectively brainwashing) without compromising the individual’s “selfishness,” since the state has no desire to create law-abiding zombies, such is done. But, as often as not, serious sociopaths are incurable and, if considered an ongoing threat to safety, are executed. Nearly no system has prisons in the normal sense, and the idea of punishment by imprisonment is considered both counter-therapeutic and wasteful.

In the sticky situation of political opposition, the individual governments can react with anything from accommodation to “vigorous encouragement” of emigration, depending on the situation. Terrorism, however, is not tolerated, and any life-threatening act is a capital offense.
In general, the inner worlds tend to be more conscious of individual behavior and how it interacts with society. Personal psychological hygiene exercises are common and the individual is conscious of how his/her behavior impacts others. At the same time, aberrations are quickly noted, and the atmosphere can be a bit oppressively conformative and conspicuously "well-adjusted." Such worlds usually are more tolerant towards computer security surveillance as well, and with that there is a risk of complacency or over-dependence. The latter is illustrated in the *Erma* story, with Commander Felna’s excessive concerns and doubts about public order and safety in outworlds that do not have such an intensive system, having come from a world that is almost an archetype for controlled environment. The other half of the hazard, complacency, arises from the assumption that the supervision is benevolently all knowing. So the oversight of the monitoring risks becoming inattentive, allowing for abuse of neglect, and individual conduct can become careless, and even reckless, expecting a save by the system.

Many outworlds have actively rejected such intrusive or perceived anti-individualistic systems and have little or no formal social control, varying from "libertarian" minimalist governments to virtual anarchies. An odd twist to the desire for limited state control are the several colonies established by private business concerns, in which the company assumes the role of state, and the people managed solely as employees. While the individual is subject to the paternalistic whim of the employer, such systems are more popular for the time being than might be expected.

The larger portion of colonies, despite comments to the contrary, simply have yet to settle into distinct independent patterns and create a new generation of orthodoxies. The trend, so far, has been that as colonies age and evolve, unique cultures arise, but, dependent on their political relationship to the earlier home worlds, their forms of government tend to become even more orthodox than, or antithetic to, the originating state systems.

That should give you a slightly better idea of how things work, and we’re already working on an extended description of many key systems, outlining the social and cultural details for more compleat environments to function in.
Little did I know that a terrorist sniper was setting up in town.

She'd brought in a 10mm L150 electro-automatic rifle and had it in a suite in the one business tower.

Power-assisted tripod, 10cm scope. It was quite a rig.

SPECIAL BACKGROUND INFORMATION

The following information is intended for the eyes of umpires only. Detailed below are the basic internal politics which the umpire should use to add depth to campaign events.

E.D.F. Internal politics.
The E.D.F. of the previous generation was an idealistic organisation filled with young, bright individuals determined to do good. Once peace came, however, a few individuals saw opportunities for privilege and status, and began to ignore the old ideals.

The E.D.F. today still maintains the façade of absolute adherence to its professed ideals, and for many members the E.D.F. creed is alive and well. There is however a proportion of officers who use the E.D.F. as a means of personal aggrandizement, and some of these individuals have undeservedly reached positions of power and influence, despite the best efforts of the Net (see below). The final result is the creation of undercurrents of opinion throughout the E.D.F. One of the strongest and least defined elements is a conservative element which embraces a number of sexist attitudes, which has already caused trouble for female combat officers such as Erma Felna.

The result of these internal E.D.F. politics in game terms can be bewildering and dangerous. Characters who express embarrassing attitudes, who cross the wrong people or who acquire delicate information might find themselves transferred into virtual exile, or given unfavorable psych reports.

Always remember that there are lots of genuinely devoted and responsible officers in the E.D.F. who hold to the old ideals and are loyal to the ConFed charter. The E.D.F. is not dying - it is just under serious threat from within.

Separatists.
Numerous systems within the ConFed have factions which advocate a weakening or breaking of ties with the ConFed. This concept is quite popular on outworld planets, where a sense of post-colonial independence has had a large effect upon the local mentality. Separatists fear that a strengthened ConFed central might seek to impose close security monitoring on all ConFed worlds, and deny ConFed planets their self rule. Many outworld planets view the disintegrating
relations between the I.L.R. and ConFed with unease, and fear the use of outworld soldiers as colonial cannon fodder by the ConFed military machine. Outworld trust in the ConFed has suffered recently due to the fiasco at Derzon, where the E.D.F. reaction to the I.L.R. invasion caused massive civilian losses and destroyed the local economy.

Extremist groups on many worlds might go to just about any length to turn public opinion against the ConFed. This can form the driving force behind any number of adventures.

Centralists.
Another extremist viewpoint, this time common in the ConFed inner systems. Centralism is simply the belief that the ConFed should take a more rigid control over member worlds, and impose standardized government, law and internal security. As such, the centralist viewpoint goes against the spirit of the ConFed charter, which guarantees the inviolable independence of member worlds.

Centralist sentiment is not organised (excepting the possibility of centralist sentiments amongst E.D.F. factions - see above). Centralism and separatism tend to fuel one another. It is the fear of centralism which gives separatism its popular appeal. On the other hand, as separatist sentiments breed civil unrest and violence, the centralist sentiments of inner system citizens can be aggravated.

Terrorism.
Any of the social tensions listed above (as well as numerous other socio-political factors) may breed terrorism. Terrorism may range from criminal acts, bombings and snipings right up to nuclear blackmail. Terrorism combined with mislead or biased media can be a powerful tool for influencing popular opinion. Recent ploys in Ekosiak revolved around using the media's separatist sentiments to convince the populace that a recent attempt at nuclear terrorism had actually been staged by the ConFed authorities to rationalise the need for tighter security measures.

Terrorism is far less common on worlds which have extensive security monitoring systems, but the populations of outworlds will not suffer the loss of privacy which security monitoring seems to entail. Terrorist acts in monitored environments must need to be carefully planned, and might well rely upon mental conditioning to defeat computer surveillance, which can notice aberrant behavior.

One interesting and dangerous organisation requires special mention. Several seemingly pointless and
unconnected acts of terrorism have been the work of some sort of terrorist cult, which seems to be intent on keeping a dangerous edge on society. They have no other apparent political motivations, and strike within I.L.R. space as often as ConFed or independent Rim space. They always engage in overt, public violence, and never sabotage or covert actions. Since their acts are usually suicidal, very little else is known about them, though it is hoped that, though widespread, there are very few of them.

The Net:
ConFed central is overseen by the Net, an artificial intelligence which has been in existence ever since the awakening. It is a single, centuries old entity. Each ConFed planetary system has a main computer Net manager which is a duplicate of the original model in the core systems. These computers have the same base personality as the central Net, modified by the experience and data bases which each computer has accumulated.

Unbeknownst to even the government, these artificial intelligences bring to bear a considerable amount of influence over day to day affairs. By making various sets of data more or less easily accessible to various parties, the Net seeks to further its goals of progressive, peaceful social order. Although it does not have any particular motive or master plan, the Net seeks to advise and assist chosen people who are supporting and encouraging the ideals of the ConFed charter and related efforts. The Net also works towards the moderation of individual success, attempting to prevent the unconstructive domination of any single personality over vital affairs.

The Net will actively participate in effecting the personal fortunes of those individuals who stand to best serve "the cause". The intervention of the Net into day to day affairs is extremely subtle. The computer is constrained from direct action, and thus can only cause other people to perform their information gathering more or less easily than normal. The Net will secretly help the advancement of the truly deserving by jockeying administrative selections, encouraging a favourable bias on the part of an instructor - all minor acts with small individual impact.

While not exactly illegal in the letter of the law, the computer's meddling in affairs would be widely disapproved of if discovered. While a few of the Net's "chosen" know about the Net's activities, they have kept the Net's secret. Umpires may feel free to use the net's subtle influence in important affairs. The Net will help out characters who seem to support the Net's aims.

The Republic.
An aggressive and cunning government, the I.L.R. is currently dominated by its militaristic factions, all of whom are in favour of expansion.

The I.L.R. faces a dangerous and delicate situation. Officially the I.L.R. has no enemies, and the military adventurism of the Republican government is not known to the average citizen. The I.L.R. faces in the ConFed an overwhelming opponent, but an opponent
which can weaken itself from within. In order to successfully expand, the I.L.R. must hope for the ConFed to tear itself apart through internal conflict, and I.L.R. agents stand ready to assist this process in any way possible.

While the I.L.R. military are willing to come to grips with the ConFed, the I.L.R. populace are not currently keen on the idea of a new war with the ConFed, since the Republic is seriously outnumbered. Any outbreak of hostilities with the ConFed would require the populace to be suitably motivated . . .

Please remember that the I.L.R. are not "evil". The republicans are doing what they are doing for what they consider are the right reasons. Their aims and means seem correct within the reference of their own world view.

Third parties.
A number of unscrupulous individuals stand ready to capitalize on the current social and political tensions. Easily disguising their actions as those of the I.L.R. or ConFed, clever and unprincipled individuals and organizations have begun to engineer civil unrest, revolution, piracy - just about any ploy which can play on the fears, confusion and tensions of the citizenry and the authorities.

An example of just such an incident is the recent unrest and violence on Ekosiak, which was masterminded by Aito Kho, a local business magnate who hoped to remove the previous political order and lead the business community in rebuilding Ekosiak's socio-political structure. The situation was only solved by dissemination of evidence of Aito's actions and goals on public nets followed by his assassination.

**Humanity.**
Human kind was once present in this area of space. It is possible for characters to encounter alien artifacts which are hundredsof years old. Such products of ancient human technology are a generation in advance of the current systems known to science.

It is possible to create adventures along the lines of exploring alien artifacts. Be careful about using this kind of story line, since the discovery of alien presence will have serious technological and psychological repercussions.

**Notes.**
To the casual eye, the society of ALBEDO is neat, well ordered and predictable. A closer examination will reveal otherwise. Stellar civilisation is reaching a crisis point, and the escalating social and political tensions may catch players by surprise. In a rational society, acts of violence and irrationality should seem all the more shocking.
FATIGUE, WEIGHT BEARING AND ENCUMBRANCE:
A character's capabilities will be affected by encumbrance, burden and fatigue. Fatigue may occur as a result of performing actions, as well as resulting from pain and shock. Burden (see section 2.3 below) and encumbrance occur only by carrying objects. Burden, encumbrance and fatigue must be carefully recorded for every character, as these qualities have a very noticeable effect on the character's performance.

Encumbrance and Weight:
Characters may be discomforted by bearing heavy weights. A character's **basic weight bearing capacity** is rated as equal to its strength +1 in kilos. A character's penalty caused by the bearing of weight is referred to as the character's BURDEN, which is expressed as a number between 1 and 4.

<table>
<thead>
<tr>
<th>Burden level</th>
<th>Weight carried by character</th>
<th>Co-ord/M.Dex penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 0:</td>
<td>Up to 1/2 base weight allowance.</td>
<td>-0</td>
</tr>
<tr>
<td>Level 1:</td>
<td>&gt; 1/2 base weight to full base weight capacity.</td>
<td>-0</td>
</tr>
<tr>
<td>Level 2:</td>
<td>Up to twice base weight capacity.</td>
<td>-1</td>
</tr>
<tr>
<td>Level 3:</td>
<td>Up to 4 times base weight capacity.</td>
<td>x 3/4</td>
</tr>
<tr>
<td>Level 4:</td>
<td>Up to 6 times base weight capacity.*</td>
<td>x 1/2</td>
</tr>
</tbody>
</table>

* Requires a strength test vs the item's weight (in kilos) on 5 to carry the object, or strength vs item weight (in kilos) on 10 to simply pick it up. The max weight that may be carried for more than a couple of meters is 10 kilos x the character's strength rating.
Fatigue loss caused by movement.
The following chart details the fatigue points lost for travelling the specified number of metres distance.

<table>
<thead>
<tr>
<th>Burden lvl</th>
<th>Walking</th>
<th>Running</th>
<th>Sprinting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-</td>
<td>1 per 50 metres</td>
<td>1 per 20 metres</td>
</tr>
<tr>
<td>1</td>
<td>-</td>
<td>1 per 40 metres</td>
<td>1 per 10 metres</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>1 per 10 metres</td>
<td>2 per 10 metres</td>
</tr>
<tr>
<td>3</td>
<td>1 per 20 metres</td>
<td>2 per 10 metres</td>
<td>3 per 10 metres</td>
</tr>
<tr>
<td>4</td>
<td>1 per 10 metres</td>
<td>3 per 10 metres</td>
<td>5 per 10 metres</td>
</tr>
</tbody>
</table>

Weight distribution of worn items:
Items of clothing or armour worn on a character's torso weigh half their normal weight for the purposes of calculating burden effects due to the distribution of the weight over the carrier's body.

Burden effects:
The burden level caused by bearing loads in combat is specified on the chart below. A character's burden is found by examining what multiple of its basic weight bearing capacity it is currently carrying (see the "burden effects" chart).

Encumbrance:
Some types of armour or clothing will encumber the wearer due to their restriction of the wearer's movements. The encumbrance of the equipment is subtracted directly from the wearer's co-ordination.

The astute will notice that both burden and encumbrance subtract from the characters' co-ordination. This results in a loss of ability in any of the characters' skills which have co-ordination as one of its governing characteristics.

Example: Auitzotl is forced to bail out of his vehicle, and the umpire decides to total up the weight he is carrying and check on his burden level.

Auitzotl is currently wearing a vac suit liner, boots and gloves and a helmet liner, all of which are of negligible weight. He wears a suit of flak armour weighing 3.5 kilos (this weight is now halved since he wears the armour on his torso). Other items include a visorless vacc suit helmet (.9 kilos), an 8mm caliber assault carbine (3.5 kilos), 4 x 32mm grenades (at .25 kilos each = 1 kilo), a full water bottle (1 kilo), a packet of survival rations (.2 kilos) and 2 spare magazines for the assault carbine (each magazine weighs .40 kilos). Thus the total weight borne by our furry friend is 1.75 + .9 + 3.5 + 1 + 1 + .2 + .8 = 9.15 kilos. Auitzotl's strength of 9 gives him a base weight carrying capacity of 10 kilos. The weight he is currently carrying falls between the 1/2 to 1 x base carrying capacity range. Auitzotl is thus rated as having a burden level of 1.

FATIGUE:
As characters perform actions which tire them out, they become fatigued. This process is simulated by the accrual of fatigue points, which represent increasing levels of tiredness and exhaustion. Fatigue points may also be gained through blood loss and other causes of shock.

The movement caused fatigue loss chart sites above specifies the number of fatigue points lost when a character walks, runs or sprints while carrying various levels of burden. Fatigue is also caused by melee combat (1 point per turn for characters who fight defensively, and 2 points per turn for characters who are fighting offensively). Fatigue is directly related to the character's stamina.

Fatigue will be proportionally higher in hot sunlight, or when performing such exercises as walking through soft sand or snow.

Fatigue causes the temporary downgrading of a character's abilities. Every time the character accumulates fatigue points equal to half the character's STAMINA rating it is penalized by a cumulative fatigue DRM of +1 to all dice roll attempts for tasks, characteristic checks and co-ordinate actions. Fatigue DRM's will accumulate as the character tires, and disappear as the character rests (exception: Fatigue caused by shock will not disappear within the time span covered by a combat).

Effects of fatigue:
When a character's Fatigue DRM reaches +4 (ie the character's fatigue points total is equal to twice its stamina score), it is exhausted or shocked, and must make a drive check vs 10 in order to perform any
actions (including standing up or walking). At a DRM of +5, the character is unconscious, and at a DRM of +6, the character is dead.

Fatigue recovery:
Before exhaustion sets in, fatigue suffered from the performance of actions may be recovered in a short enough time period to be simulated during a combat. The character may recover 1D3 fatigue points in a combat turn in which it does nothing other than rest, and 1 point in a turn in which it walks (for burden levels 0, 1 and 2), but only if the character is not bleeding (see the rules covering damage and injury). Characters who have suffered any wounds other than a graze recover lost fatigue at half the above stated rate. Other fatigue recovery is assumed to take place over a period of minutes or hours, however the umpire feels is appropriate.

Fatigue caused by long term activity:
Characters may also suffer fatigue effects from performing tasks or through other long term activities.
- If a character has been performing a slightly strenuous or prolonged activity such as walking for a couple of kilometers, walking a lesser distance carrying a level 1 burden, driving a vehicle for a fair while or performing first aid, it may become slightly fatigued. Roll the character's stamina vs 10. A failed roll will result in the character accumulating fatigue points equal to its stamina divided by 2.
- If a character has been doing hard work (ie carrying heavy loads, digging etc), it will automatically accumulate fatigue points equal to half of its stamina score, and must roll its stamina vs 10 to avoid doubling this amount of fatigue. If the dice roll is failed, roll again to avoid receiving a further fatigue loss (bringing the total fatigue accumulated to 1.5 times the character's stamina).
INTER PERSONAL RELATIONS
ALBEDO seeks to provide all characters with personalities. This is done for three reasons:

a) By giving personality traits to player characters, the character takes on a little extra "depth". The player must now take into account the disposition, goals and aims of the character itself.
b) By giving personalities to non player characters, the umpire's job is made easier and the player's tasks become more challenging. Every encounter will be shaped by the personalities of the individual characters involved.
c) By entering into the realms of inter personal relations, this game seeks to remove the notion that characters are mere robots designed to pull triggers.

ALBEDO is a conflict game, and not a combat game. In making allowances for personality development and inter personal relations, this game seeks to move into a new sphere of conflict. While seldom lethal, inter personal conflicts can be expressed in workable game terms, and can prove to be highly entertaining.

DISPOSITIONS:
The first aspect of inter personal relations simulated by ALBEDO is character dispositions. All characters and N.P.Cs must roll twice on the dispositions chart in the player's manual.

Dispositions should also be rolled for communities and organizations. Thus a character might find itself in a village that is generally "talkative", whereupon he will probably be set upon for news and gossip, or in a "straightforward" army base, where the character will only gain real acceptance as it demonstrates its competence at its job. Community dispositions are vital to the establishment of entertaining campaign environments.
TIES AND ANTIPATHIES:
The second aspect of inter personal relations simulated by ALBEDO are personal ties and antipathies. This allows an umpire to simulate the friends, enemies and beliefs of a character in simple game terms.

A tie is a feeling of friendship, loyalty, respect or duty towards a person, a nation, a group or an idea. An antipathy is a feeling of distaste, disgust or aversion to one of the above concepts.

Ties/antipathies are treated very much like skills, having both a governor and a "training" level (in this case termed EXPERIENCE). As a person acquires positive and negative experience with the people/concepts around him, the strength of feeling (ability score) which he has towards them will be effected. Index the governor with the level of experience on the skill ability chart to find the strength of "feeling".

The governor of all ties/antipathies is equal to the character's DRIVE.

Experience in ties/antipathies is given in terms of "positive" and "negative" experience. Positive and negative experience is added directly to the character's experience total in a tie/antipathy. When a tie or antipathy goes into negative experience, it inverts (ie a tie becomes an antipathy). Drop the negative sign to determine the experience level used in determining the new tie/antipathy strength.

Starting tie/antipathy experience:
Unless a person grew up sealed in a wicker basket, he will normally have a number of ties and antipathies. Starting characters will have about 3D6+20 tie/antipathy experience levels to commit to its ties and antipathies at the start of the game (characters may take a dice more or less at the players' option). These experience levels are committed only to things which might effect the game - there is no choice detailing out the character's ties to its parents when they are parsecs away from the intended sphere of action for the up and coming campaign.

Sample entities with which characters might develop ties or antipathies include:

- Another character (eg a friend, enemy or lover).
- A military or civil service.
- An ideology (eg a devotion to the ideals of the ConFed charter).
- A race (eg the character hates rabbits).
- A world or Government (Well, not everyone loves Dornthantiil!)
- an abstract phobia (eg fear of heights or cyberphobia)

Players should be discouraged from having their characters take a tie with themselves, since this is already covered by giving the character a conceited disposition.

New ties and antipathies: When characters are first given the opportunity to form an opinion about a person or organisation, roll the character's STABILITY vs 10 on the comparison chart. A failed roll will give the character 1D6 of positive or negative experience in the new tie/antipathy. Successful rolls cause no change to the character's feelings.

Changes in ties and antipathies: Changes in a character's experience level with ties and antipathies are closely tied to the character's stability characteristic. As characters receive positive or negative impressions of the elements to which they have ties or antipathies, have the player roll on the following chart to determine the subsequent changes to the character's experience with the relationship.
Tie/antipathy experience chart:

<table>
<thead>
<tr>
<th>Roll on 2D6</th>
<th>Tie/antipathy experience change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 7</td>
<td>No change</td>
</tr>
<tr>
<td>8 to 9</td>
<td>+/- 1D2</td>
</tr>
<tr>
<td>10 to 11</td>
<td>+/- 2D2</td>
</tr>
<tr>
<td>12+</td>
<td></td>
</tr>
</tbody>
</table>

**DRM's:**
- Stability = 0 to 5: +3
- Stability = 6 to 8: +2
- Stability = 9 to 11: +1
- Stability = 12 to 13: 0
- Stability = 14 to 15: -1
- Testing vs a minor event: -2
- Testing vs major event: +3

**Major emotional events:** Certain crises may trigger far greater changes to tie/antipathy experience levels than stated above (such as discovering that your lover is not quite the wholesome, upstanding person you thought they were). In such cases, double the character's experience changes resulting from the tie/antipathy experience roll.

To simulate the emotional confusion caused by nasty revelations, the umpire may decide to see-saw ties, antipathies and self image up and down several times before reaching a final result.

**FAVOURS:**
When a character approaches an N.P.C. to request a favour, the N.P.C.'s tie strength with the the character may be used to determine whether or not the favour will be granted. Roll the N.P.C.'s tie strength with the character vs the difficulty of the favour, a successful roll meaning that the favour is granted:

**Difficulty levels of favours:**
- Very simple favour (often expected as a social nicety): 2
- Minor favour (no real trouble to perform): 5
- Major favour (definitely inconvenient to perform): 10
- Very difficult or dangerous favour: 20

The above system may also be used to check for spontaneous actions which might be performed by an N.P.C. Non player characters who have formed a good impression of a player character might do favours for the player character entirely by their own initiative (ie offers of assistance, "carry your bags, ma'am?" etc). Likewise, N.P.C.'s who have a dislike of the player character might perform actions of spite (such as referring troublesome inquiries over to the player character, or starting an unpleasant rumor). Very minor unpleasantness is given a difficulty number of 2, minor unpleasantness 5, major unpleasantness 10 and really overwhelmingly nasty behavior has a difficulty level of 20. The umpire will have to conceive of possible favours or spiteful acts which might be performed, and quietly check to see whether they are carried out by the game's N.P.C.'s.

Favours will have increased chances of being granted if an N.P.C. realizes that they are important to the player character. In situations where the favour, if granted, will result in preventing the death or injury of a person with whom the N.P.C. has no feelings of antipathy, drop the favour's difficulty level by 5 points.

Favours or tests of friendship will sometimes require a person to go against their disposition, causing a certain amount of internal conflict. To simulate this, substitute the strength of the N.P.C.'s disposition for the normal favour difficulty level. If the favour roll failed, then the character's natural disposition wins over its feelings of friendship, and the favour is refused.

These sort of tests are optional for player characters, since it is really up to the controlling player to determine whether its self image is best served by assisting the character's friend, or by remaining true to its disposition.

**SELF IMAGE/EGO:**
The final aspect of psychology which these rules will attempt to simulate is the self image or ego of individual characters. The ego rules provide the means through which the disposition and tie/antipathy rules come firmly into play.

Each character is given a SELF IMAGE rating, which is used to assess the character's confidence, independence and general happiness with his or herself as a person. A character's starting self image score will be equal to its drive characteristic. In many inter-personal skills, the character's current SELF IMAGE is averaged with the skill governor when determining the character's skill ability. The skills which are thus effected by the character's self image are as follows:
A character's self image thus directly effects its performance with several skills.

In addition, SELF IMAGE can be used as an "offensive" value on the comparison chart. As such, it could prove to be a useful instrument to check the character's success at making an impression on another person (ie asking for a raise, applying for a job etc).

Increases and decreases in self image: A character's self image is liable to fluctuate a good deal during the course of play. A character's self image score may never decrease to less than half the character's drive score, or increase to a total of more than one and a half times the character's drive score.

As a general rule, things which make the character feel good will increase the character's self image, and things which make the character feel bad will decrease the character's self image. When a character performs an action which satisfies its dispositions, it will feel good (ie a greedy character feels good when it makes a large amount of money). When a character performs an action which goes against its dispositions, it will feel bad. Other things which might make a character feel good or bad are:

Ties and antipathies: Successfully contributing to something with which you have a tie (ie doing a good job when you have a tie to your career), or harming something with which you have an antipathy will influence his or her self image. Roll the strength of attachment vs the character's self image score. A successful roll will cause a 1 point change in the character's self image rating. The umpire must use extreme discretion to determine the appropriateness of such actions. Vicious plots performed against people that the character only slightly dislikes will reduce self image rather than increase it.

Success and failure: The character's success or failure in its chosen tasks will effect the character's self image. Thus the umpire may wish to hand out self image bonuses or penalties to characters at the completion of an adventure, or when an exceptional event occurs.

Player cues: When a player feels that his character has done something good or bad, the umpire is free to allow the player to change the character's self image. Thus, if the player's conscience seems to be bothering him about one of his character's actions, by all means drop the character's self image.

Recovering self image: Self image tends to average itself with the character's Drive characteristic over time (highs and lows will not last forever). In the short term, however, the recovery of lost self image may be made through compensatory actions. Once again, the performance and success of such compensatory actions is largely taken on cue from the player. Thus, if a character wrongs a friend, he might perceive a debt to the wronged party. Paying off this debt in some way will recover the self respect that was lost.

An individual's characteristics may also effect the conditions under which its self image fluctuates. A highly driven person, for instance, might set themselves particularly brutal standards. If the character fails, or perceives that it has made a fool of itself, it will lose self image points that will be recovered only through compensatory action.

Characters should test for the development of antipathies with things which make them lose self image points, and test for the development of ties with things that have made them gain self image points. Use the tie/antipathy experience chart to test for such developments.

Modifications of a character's self image can be
triggered off by a variety of situations. Official reprimands, hurtful rumors and the opinions of friends can all cause random self image loss or gain.

**Random self image loss/gain:** The amount of self image/ego which a character loses or gains is determined by a random roll. This roll is influenced by the character's stability score.

<table>
<thead>
<tr>
<th>Roll on 2D6</th>
<th>Self Image score change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 5</td>
<td>No change</td>
</tr>
<tr>
<td>6 to 8</td>
<td>+/- 1</td>
</tr>
<tr>
<td>9 to 11</td>
<td>+/- 2</td>
</tr>
<tr>
<td>12+</td>
<td>+/- 3</td>
</tr>
</tbody>
</table>

**DRM's:**
- Stability = 0 to 5: +3
- Stability = 6 to 8: +2
- Stability = 9 to 11: +1
- Stability = 12 to 13: 0
- Stability = 14 to 15: -1
- Testing vs a minor event: -2

**Intermittent reward.**
The more common or mundane an event is, the less ego change will result. Give expected or repetitive events a - DRM on the above random self image change chart (-1 to 4 at the umpire's discretion). On the other hand, very major events will cause up to double the normal change to self image generated by the above chart.

**Self image reinforcement:**
A character's self image may be bolstered up by people with whom it has a tie. Whenever a character suffers a loss of self image, immediate supportive action from persons or organizations with which the character has a tie (i.e. sitting down and talking about it) may reduce the character's ego loss. Roll the strength of the character's tie vs his stability characteristic. A successful roll will result in the character regaining 1 lost point of self image.

**LEADERSHIP:**
Leadership skill is a combination of the character's personal charisma and his skill in balancing the emotions of the people around him. Characters with leadership skill have a limited ability to effect the confidence and relationships of their companions. Leadership skill rolls may be called upon to motivate subordinates into performing various acts.

Characters with leadership skill may "force" a subordinate character to make an immediate check for a tie experience increase with the leader as soon as they first have the opportunity to interact. The leader must make a roll of its leadership skill vs 10. If the roll was successful, add 1D6 to the subordinates' tie experience with the leader. If the roll fails, then subtract 1D6 from the subordinates tie experience (possibly even creating an antipathy!)

A character with a leadership skill ability of a higher rating than his companions' self images will add a +2 DRM to all rolls made in relation to favours asked by the leader.

A character who is recognized by other characters as holding authority over them will be more readily granted favours. A DRM of -1, will be granted to the leader's dice rolls when checking for favours from his followers.

Additional bonuses may be gathered by characters who are actively acknowledged by a group to be the groups leader (this is different from merely legally being in command). To establish oneself as the leader of a given group, a character must actively attempt to overcome the leadership skill of the other character's in the group on the comparison chart. The successful establishment of a character's leadership over the others in a party grants an additional DRM of -2 to all of the leader's favour rolls, as specified above. The establishment of such recognition is a task which may take quite some time.

Character's with leadership skill may attempt to smooth over the antipathies between their subordinates. A successful roll of the character's leadership skill vs his target's strength of antipathy will result in a random decrease of the subordinate's antipathy experience with the character in question (use the tie/antipathy experience chart).

Leaders may try to overcome a follower's antipathy with him on a short term basis by rolling his leadership skill vs his subordinate's antipathy strength.

Only a relatively small group of people can be directly led by any one individual. The leadership of a large group of people sorts itself into multi-tiered group dynamics, where minor leaders organise and motivate small groups of followers, and another set of leaders perform the same function for the sets of minor leaders. Thus a sort of pyramid is formed, with the individuals at the bottom being basically untied to leaders at the top, but being subordinate to them by chain of command/deference. Prominent leaders will often attract ties (or even antipathies) from individuals that are far below them on the "leadership pyramid", since underlings will look to them for leadership. This is termed "indirect leadership", since the leader is generally unaware of the emotional ups and downs of the subordinate, and
thus seldom gets to reinforce the underling's self image (through speeches and personal example), and never gets to smooth out his subordinate's antipathies with his fellows (this task is handled by an individual's direct leader).

**EXAMPLE OF THE INTER PERSONAL RELATIONS RULES IN PLAY:**
Auitzotl is in a fire fight (leading a fairly undisciplined group of resistance fighters) when his friend Glinnes is hit and knocked unconscious. He is bleeding badly and lying in the open next to some hard cover, and Auitzotl decides to go to his aid. Auitzotl shouts to his nearest companions, asking one of them to follow him over to give him covering fire while he drags Glinnes's body across to cover. Auitzotl then dashes off without waiting for confirmation.

Of Auitzotl's 2 companions within immediate earshot, both have ties at strength level 6 with Auitzotl. They are being asked to perform a difficult favour (difficulty 10), but one which might save the life of a person with whom they have no antipathy (the favour therefore becomes difficulty level 5), which means that both must roll a 8-on 2D6 to comply with Auitzotl's request. Since Auitzotl has a leadership skill which is higher than either of his companion's self image/ego ratings, however, a DRM of -2 will be applied, added to a further DRM of -1 since the soldiers recognize that Auitzotl has limited authority over them.

One soldier rolls a 12 (which modifies itself down to a 9), and the other a 10 (which modifies itself down to 7). Thus, the second soldier will break cover to help Auitzotl pull in the injured man. The other soldier has no inclination to expose himself to enemy fire for Auitzotl's sake.

Since Auitzotl has performed a brave and selfless act, the umpire allows a self image increase roll to be made for him (without previously checking Auitzotl's tie strength with his friend, since the umpire feels that the rescue was an exceptional piece of bravery). Auitzotl will also roll to see whether there is an increase in the level of positive experience in his tie with the soldier who helped him perform the rescue. When Auitzotl's friend Glinnes regains consciousness, he will roll to check for an increase in the level of tie that he has with both of his rescuers.

If Auitzotl's self image goes up from this little episode, you will notice that his leadership skill ability will increase. In the future, his subordinates might more readily follow him into danger or obey his commands.
COMBAT
The combat rules of ALBEDO are rather more complex than the rules used for simulating tasks and interpersonal relations. This is quite simply because combat is composed of dozens of different types of actions and events. The co-ordinate action rules are designed to break down the chaos of individual actions into a workable game system.

Turn sequence:
A turn lasts from 3 to 5 seconds. Each turn is divided into 6 sections (called phases), and characters will have the opportunity to act in up to 5 of these phases, depending on the character's maximum number of actions. The performance of actions during a gameturn is ordered by the action sequence chart. The umpire will announce each phase of the turn, and all characters who are eligible to act within the phase will then announce what action their character will perform. See page 39

Initiative:
Characters who find themselves performing actions during the same turn phase as their opponents will determine the priority of their actions in order of the character's initiative ratings (determined at the start of the turn by adding each character's initiative dice score with its chosen weapon's handiness rating initiative modifier). The character with the lowest initiative score must announce its intended action for the current phase, but this action is then preempted by the character who won the initiative, giving him both the jump on his opponent's action and the fore knowledge of what that action will be.

Weapon handiness ratings for firearms are as follows:

<table>
<thead>
<tr>
<th>Handiness category</th>
<th>Initiative modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very handy</td>
<td>0</td>
</tr>
<tr>
<td>Handy</td>
<td>-1</td>
</tr>
<tr>
<td>Average</td>
<td>-2</td>
</tr>
<tr>
<td>Cumbersome</td>
<td>-3</td>
</tr>
<tr>
<td>Very cumbersome</td>
<td>-4</td>
</tr>
</tbody>
</table>

Melee weapons are not rated for handiness. Wielders of melee weapons fighting against melee opponents who are using longer weapons must subtract 1 from their initiative dice score. Characters attempting melee against opponents armed with firearms will always lose the initiative unless they are attacking with surprise.

Crewed vehicles:
Vehicles are slightly more complex than individual characters because of the number of crew on board. As a rule, passengers and gunners will have their own series of actions to perform, and will move and act in the sequence detailed above.

Co-ordinate actions:
Any action which takes place during a single combat phase is defined as a co-ordinate action. A character may perform a number of co-ordinate actions during a combat turn as determined by its co-ordination score.

Types of actions:
Whenever a character aims a weapon, communicates
(either verbally or via electronic equipment or hand signals), drives a vehicle, fires a weapon, removes an empty magazine, fits on a new magazine, falls prone, stands up, observes his surroundings, primes a grenade, throws a grenade or any other such activity, one of its actions for the turn is used.

**Movement:**
Walking characters move forward approximately 2 meters in every phase of a game turn, at the cost of one of the character's actions for the turn. Running characters move 10 meters whenever the character expends 2 of its actions to do so. Sprinting characters move 15 meters whenever 2 actions are expended on sprinting movement. **Running** characters may fire on the move (assuming they can pay the extra action that this will cost), but suffer an accuracy DRM when they do so. Walking and running characters may not take aim with firearms. Characters may not fire in any turn that they sprint.

**Small unit tactics skill:**
The tactical skill of the leader of a group of combatants may well have a bearing upon the initiative scores of its followers. At the beginning of any combat turn, a group leader may elect to use his small unit tactics skill (using two of his actions for the coming turn in order to do so). The leader must first designate a group of his followers with whom he will communicate during this turn. A leader may only chose to assist followers when he is familiar with his subordinates' current situation (i.e., they must either be in view of the leader, have communicated with the leader during the previous turn or be in view of a person who has communicated with the leader over the past turn).

The leader now rolls on the comparison chart, matching its tactics skill against either the opposing leader's tactical skill, or the difficulty of the tactical situation (i.e., a "simple" situation might be one where the unit is dealing with a familiar problem which may be handled by routine procedures).

If the roll is successfully made, then 1 point is added to the initiative scores of all troops with whom the
leader communicated during this turn, but only if those troops have some level of tie with the leader. If the roll is failed by 2 or more points, then 1 point is subtracted from the initiative scores of all troops with whom the leader communicated during this turn.

Leaders whose activity involves the monitoring and leading of subordinate leaders will not deal directly with individual combatants. Instead, they will advise and instruct the leaders who are subordinate to them. A successful tactics roll made by a monitoring leader will grant his subordinates a -1 DRM on their own tactics skill tests. A roll failed by 2 or more points will cause the subordinate leaders to suffer a +1 DRM to their tactics skill tests. This DRM will last until the tactical situation somehow changes, or until superseded by new tactical instructions. The "coaching" of subordinate leaders will require constant monitoring of communications traffic between the leaders and their men, as well as regular situation appraisals from all subordinates.

**COOLNESS UNDER FIRE:**

Coolness under fire represents a character's ability to avoid panic or hesitation in circumstances that are dangerous or alarming. Coolness under fire tests should be taken to measure a character's calm or presence of mind in any crisis situation.

The following events will cause a character to make a coolness under fire test during combat:

- The character is fired at for the first time during the current combat.

- The character suffers a near miss by enemy gunfire (i.e. the character is missed by only 1 or 2 points on the dice).

- The character enters into melee combat for the first time during the current combat.

- The character is surprised by the sudden appearance of an opponent.

- One of the character's companions is killed or suffers a massive or catastrophic wound within full view of the character.

A failed C.U.F. test under these conditions drives the tester to duck or flinch sufficiently to spoil any aim he might have already drawn, and causes the loss of the character's next two actions. Characters who fail a coolness under fire test while engaged in a firefight will normally duck behind any affordable cover within 10 metres, or fall prone. They are not expected to stand about dumbly waiting to be shot.

**Procedure:** A coolness under fire test is taken by testing the characters coolness under fire skill against 10 on the comparison chart. Relevant DRM's for combat caused C.U.F. tests are -1 for every friend currently within 10 meters of the tester (up to a max DRM of -3).

**Example:** Auitzotl's armoured vehicle brews up, and both he and the driver bail out. The driver is immediately hit and killed by rifle fire coming from a nearby doorway.

Auitzotl must now make a coolness under fire check, since his companion has just been killed. Auitzotl's coolness under fire roll is failed. Auitzotl loses his next two actions, and he huddles beside the ruins of his burning vehicle.

Once two phases have passed, Auitzotl gets over his shock and looks around to see an I.L.R. soldier emerging from the doorway. Auitzotl fires at the rabbit trooper and misses! Since he has just been fired on for the first time during the current combat, the I.L.R. soldier must make a C.U.F. roll. He fails his roll, and jerks back into cover behind the doorway, where he will remain inactive for the next two phases. Auitzotl has now pinned his opponent, and may use the next two actions to move from his exposed position.

**Tasks:**

A task is perhaps best described as any single action which the character attempts which will take more than one phase to complete. Tasks are individual actions or attempts to achieve set goals, as opposed to the constant flow of action and reaction encountered in combat. Should a character desire to ballroom dance, pick a lock or play a video game, this is a task that the character has set itself, and a check is made on the appropriate skill or characteristic to decide the success or failure of the venture.

Set all tasks an average time for completion. Finishing a task before this average time has elapsed will be more difficult than finishing the task in the usual period. If a character wishes to persist at a task after a few unsuccessful attempts, have the character make a drive roll in order to do so.

**Combat Procedure.**

Combats utilise the action sequencing and co-ordinate action systems described in the previous chapter of the rules. When a character performs an offensive action (such as firing a weapon at a target or making a blow in melee), they will be required to make a roll on the comparison chart, testing their skill against the difficulty of the action. Since firefight and melee combats use slightly different systems for determining the chance of making a hit, these two types of combat will be discussed separately.
MISSILE WEAPONS FIRE (fire fights):
Missile fire is taken as a test of the firer’s weapon skill ability score vs the difficulty of hitting the target. The “shot difficulty” is determined by the range of the target, modified by the speed of the target, the firers’ movement, the time spent on aiming the weapon etc. These values are to be found on the “Shot Difficulty Chart” on page 38 of book three.

Range brackets:
Missiles are given five range brackets: Close, Short, Medium, Long and Extreme ranges. Close range shots are any shots made at targets within 10 metres of the firer. Short range shots are those made without any allowance for the deflection of the round due to range. Medium range is the distance at which it becomes slightly harder for the firer to draw a bead on the target. At long range, adjustments to aim must be made due to the drop of shot, and extreme range is the topmost limit of effective firepower.

Rapid fire:
Single shot weapons may use rapid fire, expending two rounds in a single firing action. If the target is hit by a dice roll which was 2 or more points under the minimum required roll, then the target will be struck by 2 separate rounds (roll hit location, penetration and damage for each of these hits separately).

Automatic fire:
Automatic fire is divided into two types: controlled bursts of 4 rounds, and wild bursts of c.8 rounds.

Controlled bursts: Controlled bursts receive a DRM to hit of -1 at medium and long ranges.
For every two full points of dice score that the rolling player undercuts the minimum roll to hit, the player scores 1 additional hit on the target (up to a maximum of 4 hits total). When a target is struck by multiple bullets from a controlled burst, roll once for hit location. This is the location struck by the first round. For all subsequent rounds which have struck the target, roll 1D6. On a 1 or 2, subtract 1 from the hit location number of the first round to determine the location struck by the next bullet. On a score of 5 or 6, add one to the first bullet’s hit location score to determine the next location struck. Thus multiple hits from controlled bursts are very tightly grouped.

Wild bursts: A character firing a wild burst receives beneficial hit DRMs at close and short ranges.
For every two full points of dice score that the rolling player undercuts the minimum roll to hit, the player scores 1 additional hit (up to a maximum of 8 hits in total).

When an automatic weapon fires at a group of people in a single confined area, all hits achieved should be randomized amongst all of the clustered targets.

Example: Auztoll, armed with a assault carbine, finds himself involved in a fire fight. Auztoll’s co-ord score of 11 gives him 4 actions per turn.

Auztoll elects to run forwards 10 metres, allowing him to see around the corner of a large building and into the next street. This movement will cost him 2 of his 4 actions. Looking at the action sequence chart, we see that Auztoll’s second action is completed in phase 3 of the turn, so Auztoll is assumed not to reach the building until the end of phase 3. Auztoll now elects to spend one action observing the area around the corner of the building. He therefore receives a report on the scenery around the corner of the building in phase 4.

Upon peering around the corner, Auztoll is told that he sees an I.L.R. soldier running down the street towards him. He elects to use his last action for the turn in firing at this target. The I.L.R. soldier is 90 metres away (medium range for an 8mm assault carbine). Auztoll’s Longarm’s skill of 11 vs the difficulty number for a medium range shot (10 for a firearm using “dart” ammunition) gives him a basic roll to hit of -8 on 2D6. The DRMs applicable to this situation are +1 because his target is sprinting, and +2 for an unaimed shot (aiming would have taken one more action). Auztoll elects to fire a controlled burst, giving an automatic fire DRM of -1. Total DRMs thus total +2.

Auztoll’s player rolls 2D6 to hit, and the dice come up totaling 5. With a DRM of +2, this raises his dice score to a total of 7 - a hit! Since Auztoll modified dice roll was only 1 below the minimum score required to hit, his target is struck by only a single bullet from the burst.

MELEE COMBAT:
Rolls to hit in melee combat are taken as a test of the attacker’s skill ability score vs the target’s melee defense rating.

A character’s melee defense is found by averaging its Co-ordination score with its skill rating in its opponents chosen attack form.

Parries and dodges are assumed to happen all through a combat, and are represented by the increased chance of missing a highly skilled opponent. Characters may, however, elect to forgo their current attack, giving their opponent a DRM of +1 on it’s next attack.

Offensive/defensive melee combat:
A combatant may choose to fight either offensively or defensively during a combat. At the end of any turn in
which a character fights offensively, the character will accrue 2 fatigue points. Characters who choose to fight defensively will lose 1 fatigue point per turn.

There is a DRM of +1 to hit an opponent who is fighting defensively.

All characters who choose to fight defensively suffer a DRM of +1 on all dice rolls to hit their opponents.

**Melee weapons reach:**
In melee combat, subtract the length of the shortest weapon from that of the longer. This is the reach difference. Whenever an attack is made by the shorter weapon against the wielder of the longer weapon, the reach difference is used as a positive DRM on the roll to hit. Once the shorter weapon actually scores a hit, however, the reach difference is applied to attacks made by the longer weapon against the user of the shorter weapon (the wielder of the short weapon is assumed to have now closed the range). This situation will see-saw back and forth as one or the other antagonist successfully achieves a hit.

Subtract 1 from all hit location dice scores made by characters who have a larger frame size than their opponent.

**Locks:**
Characters with a skill in "Wrestling" at training level 10+ may convert grapples into control or limb breakage attempts. Roll the character's wrestling skill ability vs 10 to make a lock on the opponents limb. A roll of strength vs 10 may then be made to break the locked characters arm (serious impact wound), or the victim may simply be held in position for as long as the locking player desires. Characters who wish to get out of a controlling lock in subsequent turns must roll co-ord vs 20 to do so.

**Alternative melee actions:**
During the course of melee combat, many actions may be performed which are not merely strikes. The ways and wherefores of many of these we now detail out below.

A successful grapple will immobilize the target character. The grappled individual may only punch (elbow) at a DRM of +2, or try to break the grapple. A grapple may be followed with a lock, a trip or a throw, or the grappler may "bear hug", testing str vs str in an attempt to inflict 1D3 fatigue points on his victim.

<table>
<thead>
<tr>
<th>Sample melee actions.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Action performed</td>
<td>Attacker's characteristic tested</td>
<td>Defending characteristic</td>
</tr>
<tr>
<td>Grapple</td>
<td>Wrestling skill</td>
<td>opponent's co-ord</td>
</tr>
<tr>
<td>Trip</td>
<td>Co-ord</td>
<td>opponent's co-ord</td>
</tr>
<tr>
<td>Throw grappled opponent</td>
<td>Wrestling skill</td>
<td>opponent's strength</td>
</tr>
<tr>
<td>Break grapple</td>
<td>Strength</td>
<td>opponent's strength</td>
</tr>
</tbody>
</table>
A character who is tripped suffers the knock down effects detailed in the rules section on shock. Trips may be performed at a distance, much like a kick attack (with a range of 1). Trip attacks made at range (i.e., not having been preceded by a successful grapple) will be made at a DRM of +1, and with a further DRM of +1 if the defender is of a larger frame size than the attacker.

Throws may only be attempted against grappled opponents. Thrown characters will suffer damage as if they have fallen two metres.

**Blased attacks:**
Characters making aimed shots at clearly visible targets may bias their aim towards striking a particular hit location. At close and short range (or out to long range with telescopic or smart sights), characters may opt to shoot high or low. Shooting low causes a DRM of +2, and replaces the normal 1D10 hit location roll with a roll of 1D6+4. Shooting high incurs the same accuracy penalty, but the hit location roll will be made on 1D6.

Please bear in mind that biased strikes will influence all dice rolls of the elected type which result from the roll to hit. Thus if a character biases a burst of automatic fire towards striking high, and the burst scores three hits on the target, all three hit location rolls will be made on 1D6.

When a melee attack or a close/short range missile weapon attack is made upon an unsuspecting opponent, the attacker may select which location his strike will hit without the need to roll for hit location.

**Once a hit has been scored in melee or missile combat, the next steps are as follows:**

1. Determine hit location.
2. Check to see whether the strike has penetrated the target's armour.
3. Determine damage caused by the hit.

At the end of each turn, increment all fatigue points lost caused by character movement, character actions and blood loss.

**ARMOUR:**

The armour rules used in this game revolve around a simple dice roll on the *comparison chart*. While something more complex could have been used, it is best to take the simple way out and use the game's basic chart as much as possible. As is, the armour penetration rules are quick, and accurate enough to ensure realistic play.

Armour protects the wearer in two ways. Firstly, armour prevents the penetration of the target through the toughness of the material and the presentation of glancing surfaces to incoming hits. Secondly, some forms of armour cushion or distribute the impact of a blow across a wider area, thus lessening the effect of the hit by reducing the energy of the blow. The protective value of the various types of armour available in this game are specified in the equipment lists. The protective qualities of armour are expressed by two ratings; *Penetration resistance* and *Impact distribution*. The first of these represents the armour's ability to resist penetration by a weapon, and the second represents the armour's ability to dissipate the energy of weapon hits.

**Multiple layers of armour:**

If a character opts to wear multiple layers of armour over a hit location, it will receive no benefits to its penetration resistance rating. When determining whether or not a hit penetrates a character's armour,
roll only once, and use only the highest penetration resistance value of any one of armour covering the location.

Multiple layers of armour can increase a hit location's total impact distribution rating. If a character wears two items of armour on one hit location then add together the impact distribution of both armours.

**Helmets:**
Helmets do not completely cover the wearer's head with a homogenous layer of protection. Roll 1D6 and consult the following chart to see which part of the head has been hit:

<table>
<thead>
<tr>
<th>Dice</th>
<th>Front</th>
<th>Side</th>
<th>Rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skull</td>
<td>Skull</td>
<td>Skull</td>
</tr>
<tr>
<td>2</td>
<td>Skull</td>
<td>Skull</td>
<td>Skull</td>
</tr>
<tr>
<td>3</td>
<td>Skull</td>
<td>Skull</td>
<td>Skull</td>
</tr>
<tr>
<td>4</td>
<td>Upper face</td>
<td>Skull</td>
<td>Skull</td>
</tr>
<tr>
<td>5</td>
<td>Lower face</td>
<td>Lower face</td>
<td>Skull</td>
</tr>
<tr>
<td>6</td>
<td>Neck</td>
<td>Neck</td>
<td>Neck</td>
</tr>
</tbody>
</table>

**DRMs:**
Fired at from below: +1
Fired at from above: -1 or -2

The equipment lists will inform you as to which areas of the head are covered by different ratings of armour protection.

**Armour penetration procedure:**
To penetrate armour and deal their wounds to an armoured body, weapons must defeat the penetration resistance of the armour with the penetration of the weapon. Roll on the comparison chart, comparing the penetration number of the weapon with the penetration resistance of the armour. A successful roll indicates that the bullet has penetrated through the target's armour.

Weapons with penetration values of 9 or more points higher than the defending armour's penetration resistance will penetrate automatically, without recourse to a dice roll.

Impact weapons (clubs, size 9 army boots etc) do not check for penetration - they are automatically assumed to fail.

**The effects of penetration failure:**
If a strike does not penetrate the target location's armour, then the weapon's damage will be effected by the armour's impact distribution. Move the weapon's damage column on the damage determination chart across to the right by one space for every point of impact distribution covering the effected location.

Low energy weapons such as grenade fragments or knives have no effect on the target if they fail to penetrate armour.

**WEAPONS:**
All weapons used in this game are rated for two main qualities; penetration and damage. The penetration rating of a weapon is used to represent the weapon's ability to defeat armour. A weapon's damage rating represents the extent of wound which the weapon will be likely to cause to any targets struck by it. Please read the rules sections on armour penetration and damage determination for an explanation of these procedures.

**Damage ratings:**
All weapons have a damage rating, which is used as a DRM on the damage determination chart.

A character's damage with melee weapons is increased by one if its strength is 2 or more points higher than its melee opponent's strength score. A character's melee damage is lowered by 1 point if its training level in its melee attack form is 7 or lower.

**Range effects on missile fire:**
The effective strength of a missile drops off sharply with range. The firearms characteristics chart and the equipment lists show the effects of increasing range on the penetration and damage of kinetic energy weapons (bullets and shells). Base bleed equipped bullets ("darts") vent gas out of their tails to reduce the effects of drag on the round, and thus lose less energy over long ranges.

**WEAPON BREAK DOWNS:**
On a roll to hit of 12, firearms stand a chance of breaking down. Roll 2D6 and consult the chart below.

**Firearm break downs chart.**

<table>
<thead>
<tr>
<th>Dice roll</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-7</td>
<td>No effect</td>
</tr>
<tr>
<td>8-10</td>
<td>Stoppage, 1 action phase to clear.</td>
</tr>
<tr>
<td>11-12</td>
<td>Jam, Roll M.Dex vs 10 each turn to clear. 2 failures mean that special tools will be required to clear the breach.</td>
</tr>
</tbody>
</table>

**Caseless ammunition:**
The caseless cartridge format used by the I.L.R. for its 6mm caliber ammunition is susceptible to breakdowns after being exposed to dramatic pressure drops or severe temperature changes. Caseless ammo checks for breakdown effects after such exposure to
adverse conditions on any roll to hit of 11 or 12.

**GRENADES AND EXPLOSIVES:**
Hand grenades roll to hit using the normal shot difficulty chart, with the following range brackets:

<table>
<thead>
<tr>
<th>32mm</th>
<th>48mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short:</td>
<td>20</td>
</tr>
<tr>
<td>Medium:</td>
<td>40</td>
</tr>
<tr>
<td>Long:</td>
<td>60</td>
</tr>
<tr>
<td>Extreme:</td>
<td>$60 + (\text{str} \times 2)$</td>
</tr>
</tbody>
</table>

**Fragmentation weapons:**
Fragmentation grenades and the like attack 1D6 hit locations of the target with light splinters and shrapnel. Explosive fragmentation weapons have a separate explosive damage which is also rolled for (this represents the initial blast of the explosive). Body armour does not distribute the effects of explosive shock, so it will always be rolled on column 5 of the damage determination chart.

The full effects of blast and damage are only dealt to characters who are standing within 5 metres of the blast. Damage then lessens with the range to the explosion's center. Grenades and H.E. missiles have a blast radius of c.15 metres. Reduce the explosion's blast effects by -4, and the damage and penetration of fragmentation hits by -2 for every 10 metres distance between the stricken character and the center of the explosion (out to the weapon's maximum blast radius). Characters caught more than 10 metres from the center of a grenade blast receive only half the normal number of fragmentation hits (1D3 rather than 1D6), and will avoid taking fragmentation hits altogether if they can make a saving roll of 7- on 2D6.
A direct hit on a small target (such as a person or a window) with a projected grenade is achieved on a roll 2 or more below the minimum roll required to hit the target normally, but only if the hit was as a result of direct fire. When this occurs against a living target, the explosive effect dealt to the target is at +4 damage.

When an explosive device goes off near a target, all characters immediately nearby suffer the 1D6 fragmentation hits specified above (unless struck by a projected grenade - see above). All characters must now make a saving throw (see the grenades and explosives section of the equipment lists for the required saving throws against the various weapons). If the saving throw fails, then the damage caused by each of the fragmentation hits made by the grenade is doubled. Characters who were close to the blast but not directly beside it may, at the umpire’s option, make a saving throw to avoid taking any damage from the device at all (a successful roll indicates that the character dodged in time, or was missed by pure luck).

**Grenade throwing action expenditure:**
Normally two action must be expended to throw a grenade (1 to arm and one to throw). Grenades will usually explode at the end of the phase after they are thrown, although they can be fused for a delay of 1 to 6 phases. Hand grenades are treated as indirect fire weapons for the purposes of timing of fire (see below).

**Missed shots:**
Missed shots with grenades or similar area effect projectiles when using direct fire roll will fall either short or over the target hex. Roll 1D6 for the fall of shot:
1-2 = 10 meters short.
3-4 = 10 metres to the left or right.
5 = 10 meters over.
6 = 20 meters over.

Missiles which have been thrown their maximum range will always drop short. Double the range of all misses made by projected grenades, missiles or vehicle mounted weapons at long or extreme range.

**Indirect fire:**
Indirect fire is performed in the usual way, with the firing character rolling its weapon skill vs 15 for success. DRM's for indirect fire (IDF) are +2 for the first 2 shots at a target if the firer does not precisely know the range to the target (eg. through having used the range finder built into an infantry rifle). All normal firing DRM's are also taken into consideration when firing indirectly. Carefully aimed shots are not allowed on the first shot at any target.

**Timing of fire:** Indirect fire takes place after all direct fire due to occur during the current action phase has been adjudicated. Thus if two characters (1 with a rifle and 1 with a hand grenade) wish to attack each other in the same phase, the grenadier will automatically lose the initiative.

**MISCELLANEOUS PAINFUL EXPERIENCES:**
A number of mishaps may cause damage to a character. The following lists are intended as guidelines for determining the damage suffered by characters from a variety of events.

**Burns:**
Burns caused by large fires or incendiary devices attack the character with damage ratings of +1 to +3 on damage column 3 (vehicle brew-ups are made at a damage rating of 2). Burns do not cause bone breakages or bleeding effects when wounds are suffered, but do cause fatigue points loss from shock. Burn damage will not normally go through body armour, but may set the armour on fire, chewing its way through in 1D3 to 1D6 turns. Blazing characters should make coolness under fire rolls to avoid running around in panic rather than rolling out the flames.

**Falls and explosions:**
The damage caused by a fall is determined by the height of fall, as shown on the following chart:

<table>
<thead>
<tr>
<th>Height of fall*</th>
<th>Number of locations damaged</th>
<th>Damage caused by each attack (column 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 meter</td>
<td>1</td>
<td>-2</td>
</tr>
<tr>
<td>up to 2 metres</td>
<td>1D2</td>
<td>0</td>
</tr>
<tr>
<td>up to 3 metres</td>
<td>1D3</td>
<td>+1</td>
</tr>
<tr>
<td>up to 4 metres</td>
<td>1D3</td>
<td>+2</td>
</tr>
<tr>
<td>Up to 8 metres</td>
<td>1D6</td>
<td>+3</td>
</tr>
<tr>
<td>up to 16 metres</td>
<td>1D6</td>
<td>+5</td>
</tr>
</tbody>
</table>

* Avians with large wings (ie not penguins or ostriches) halve the effective height from which they have fallen for the purposes of determining fall damage.

Fall victims are always knocked off their feet.

Characters who have a skill in wrestling may make a skill roll vs average difficulty to negate the damage caused by a fall of 1 metre (taking 1 fatigue point instead), or roll vs a difficult task to negate the damage taken from a 2 metre fall (instead taking 1D3 fatigue points).
Vacuum exposure:
Exposure to vacuum deals 1D10 fatigue points to a character per turn. Pressure drops from vacc suit punctures will cause varying amounts of fatigue, as shown below:

<table>
<thead>
<tr>
<th>Type of breach</th>
<th>Fatigue points lost per turn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor puncture</td>
<td>1/2 pt per turn</td>
</tr>
<tr>
<td>Puncture (eg. a bullet hole)</td>
<td>1D2 per turn</td>
</tr>
<tr>
<td>Tear (eg. a knife slash)</td>
<td>2D2 per turn</td>
</tr>
<tr>
<td>Major breach</td>
<td>2D3 per turn</td>
</tr>
</tbody>
</table>

Once a character returns to a pressurized environment, fatigue caused by vacuum exposure is recoverable.

Fatigue DRM's of +2 or greater from pressure drops cause a serious wound to the victim's chest. A fatigue DRM of +3 or higher caused by vacuum exposure will cause a serious head wound (ruptured eardrums). A character who suffers a fatigue DRM of +4 from direct vacuum exposure is blinded.

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**DAMAGE**

This game rejects the concepts of hit points and critical hits. The body can suffer a fair bit of knocking about, but it tends to abruptly cease to function when a vital part ceases to work. Characters will die through these means, or through shock, but it is unthinkable that a person could simply be "chipped to death" by minor hits whittling away abstract "hit points". Blood loss and pain are major causes of shock, and all of these are similar to fatigue in their biological mechanism. Thus fatigue may be caused by wounds and bleeding, and high fatigue DRM levels are fatal.

Wounds affect a body in several ways. Through tissue damage, which impairs the function of the injured part, through blood loss, which fatigues and weakens the body, and through shock and pain, which tire the character and halt its ability to act.

**Damage determination procedure:**
The damage determination system of ALBEDO relies upon a rather complicated chart (the Damage Determination Chart). This chart is simple to use once it is properly understood.
All damage rolls are made by rolling 2D6 and cross referencing the result with the appropriate column on the chart.

Starting column:
Column 1 - Penetrating weapons
(eg. bullets, knives etc.)

Column 2 - Slashing weapons
(eg. Teeth, shell splinters, machetes etc.)

Column 3 - Narrow point impacts
(eg. fighting sticks, "blunt trauma" etc.)

Column 4 - Impacts
(eg. falls, explosions etc.)

The damage rating of the striking weapon, the location of the hit and the frame size of the target all act as DRMs on the damage roll.

Damage roll DRMs:

<table>
<thead>
<tr>
<th>Frame type</th>
<th>DRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>+2</td>
</tr>
<tr>
<td>Light</td>
<td>+1</td>
</tr>
<tr>
<td>Average</td>
<td>+0</td>
</tr>
<tr>
<td>Solid</td>
<td>-1</td>
</tr>
<tr>
<td>Huge</td>
<td>-2</td>
</tr>
</tbody>
</table>

Hit location DRMs:

<table>
<thead>
<tr>
<th>Location struck</th>
<th>DRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>+3</td>
</tr>
<tr>
<td>Chest</td>
<td>+2</td>
</tr>
<tr>
<td>Abdomen</td>
<td>+1</td>
</tr>
<tr>
<td>Leg</td>
<td>-0</td>
</tr>
<tr>
<td>Arm</td>
<td>-1</td>
</tr>
</tbody>
</table>

Associated characteristics:
(for wound DRMs)

Impact distribution.
If impact distribution comes into play (if the target's armour was not penetrated), shift the damage result across to the right by 1 column for every point of impact distribution on the effected hit location. If this column shift moves the damage column past column 5, then roll the damage on column 5 and apply a DRM of -2 for every unit of excess column shift.

The effects of damage.
Damage falls into two categories: WOUNDS and SHOCK.

Wounds: Tissue damage is represented by the loss of the ability to use characteristics associated with the afflicted part. A cumulative adverse DRM is suffered which is applied to any roll (except a wound resistance roll) which involves a use of the characteristics associated with the wounded body part. Associated characteristics are as follows:

HEAD: Reason/Intuition/Manual dexterity
ARMS: Strength/Manual Dexterity
CHEST: Strength/
ABDOMEN: Co-ord/Strength
LEGS: Co-ord/

Wound DRMs are brought into play any time that a skill is used which involves the damaged characteristic as one of its governing characteristics. Subtract intuition DRMs directly from a character's initiative ratings. Where two or more wound DRMs are relevant to the use of a skill (ie with a skill governed by 2 characteristics), only the highest of these is taken as the dice roll modifier to be used in the skill test. Do not add all the relevant DRMs together (although DRMs caused by multiple wounds to the same characteristic will accumulate).

Please note that wound DRMs never effect a character's wound resistance rolls, but do effect shock resistance rolls.

Wound definitions:
Grazes:
Shallow surface wounds or bruising. Grazes or cause a characteristic DRM of +1, and do not significantly bleed.

Light wounds:
Light wounds are painful but not disabling, and cause a characteristic DRM of +2. In addition to the DRM effects, characters who have suffered light wounds receive 1 fatigue point (recoverable) at the end of any turn in which they perform an action which involves moving or jolting the injured part.

Serious wounds:
Serious wounds are disabling, and cause a characteristic DRM of +3. If the character was hit in an arm, it must drop any item carried in that hand. Characters who are hit in the legs or abdomen may not run, jump or sprint. Characters who have been wounded in the chest or head recover fatigue points at half the normal rate. Characters who are suffering from serious wounds receive 1 fatigue point (recoverable) whenever they perform any action. Serious wound cause blood loss of 1 point per turn (see overleaf).

Massive wounds:
Massive wounds completely disable the victim and cause a characteristic DRM of +4. Characters who have suffered massive wounds may only perform actions if they successfully make a roll of their DRIVE vs 10 at the start of the turn. Characters who
have suffered massive wounds receive 3 fatigue points (recoverable) whenever they perform an action, and recover lost fatigue at a rate of 1 point per turn of rest.

Massive wound cause 4 points of blood loss per turn (see below). If a character with a massive wound performs any action involving physical movement, it will bleed 1 extra point of blood loss, regardless of whether the wound has been successfully staunched or not.

Catastrophic wounds:
Catastrophic hits to the head or chest instantly kill the character. In the abdomen, the character will be hurtled into an ante-mortem coma, knocking the character out of play and inflicting unstauchable 6 points of bleeding per turn (the character is going to die - it just might take a while . . . ).

In the arms or legs, a major bone breakage has occurred. The character will suffer 1 point of fatigue whenever he performs an action or is jarred. Otherwise, all effects of catastrophic hits in the arms or legs count as if the character had suffered a massive wound. Blood loss from catastrophic wounds to the limbs is 10 points per turn for a hit to the legs, or 6 points per turn for a hit to the arms.

Shock:
Shock is simulated by fatigue loss and loss of actions. Fatigue loss from shock is not recoverable in the scope of time covered by a combat, but will disappear over time.

A character may suffer only 1 shock result in any given phase. When multiple hits occur, only the most severe shock result will take effect.

Stagger:
Inflicts 2 fatigue points. The character is rocked by the blow, and loses its next action.

Stun:
The character loses 4 fatigue points, and temporarily halves the number of actions that it receives per turn. After two full turns have past, the character may roll its DRIVE vs 10. If successful, it recovers and once again uses its full number of actions per turn. If the roll is failed, the character rolls again every turn until it succeeds.

Knocked down:
The character is knocked off its feet and suffers 6 fatigue points. 6 phases must pass before the character may once again perform any actions. Once these 6 phases pass, the character counts as being stunned (see above).

Knock out:
This shock effect causes 8 fatigue points, and renders the target insensible from shock for 1D6 turns. The character must then test its drive vs 10 to regain its wits enough to once again begin performing actions (after which it will count as being stunned - see above). If the first drive roll is failed, then a minimum of 1D6 turns must pass before the character may try again. In the interim, the character is assumed to be unconscious.

Blood loss:
Blood loss is determined by the wound category dealt to the character. Blood loss from a wound is one point per turn for a serious wound, 4 points per turn for a major wound, and 6 to 8 points per turn for catastrophic wounds.

Impact weapons never cause bleeding unless a "2" was rolled to hit the target. Bleeding from impact weapons is internal. Massive internal wounds bleed at a rate of only 2 per turn.

Bleeding is a cause of fatigue. Every point of blood lost causes one point of non recoverable fatigue on the target.

Staunching blood loss.
Bleeding wounds may be "staunched" to halt blood loss. Attempting to staunch a wound is a task, and therefore takes place through a whole combat turn. Check the First aid skill of the staunching character vs the difficulty of the task.
- Staunching a serious wound is a simple task.
- Staunching a major wound is a task of average difficulty.
- Staunching a catastrophic wound is extremely difficult.

Give a DRM of +1 to all attempts to staunch the bleeding caused by massive or critical wounds to the torso. The difficulty of staunching internal bleeding is raised by 1 level.

If an attempt to staunche a major or catastrophic wound fails by only one or two points, then halve the blood loss suffered by the patient during the turn.

Once a wound’s bleeding is stopped, it will remain so as long as pressure is kept on the wound (ie by using a field bandage).
HEALING.
Except for the staunching of blood flow, most wound treatment is not performed in the scope of the combat game. Healing utilizes a number of dice rolls in an effort to bring an element of worry, hope and struggle into the realm of wound recovery.

Blood loss/Tissue damage recovery:
If the blood loss from a wound is kept at zero for twenty minutes, no further losses are taken unless the character moves (unless carefully carried), is knocked over or struck on the wounded hit location. Up to 10 points of blood loss fatigue may be erased by the use of blood transfusion every half hour.

A successful stamina roll vs 12 is required before any healing may take place (roll once per day until the roll is made). Once this roll has been made, the character will begin to heal. Find the character's wound level on the chart below. At the end of each week of rest (or a fortnight of rest if the character is placed under stress) the character may roll the average of its stamina and the supervising medic's medical skill vs the wound's healing difficulty number on the comparison chart. A successful roll will lower the character's wound to the next lowest category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Healing difficulty number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catastrophic</td>
<td>15</td>
</tr>
<tr>
<td>Massive</td>
<td>12</td>
</tr>
<tr>
<td>Serious</td>
<td>10</td>
</tr>
<tr>
<td>Light</td>
<td>10</td>
</tr>
<tr>
<td>Graze</td>
<td>8</td>
</tr>
<tr>
<td>Healed</td>
<td></td>
</tr>
</tbody>
</table>

Shock recovery:
Shock recovery is tested at set points after the character is wounded. All fatigue losses from shock are recovered once a shock recovery roll is made. Shock recovery rolls may be attempted at intervals of 1/2 an hour, one hour, three hours and 1 day after the character suffered its wound, and every day thereafter. A roll must be made of the character's stamina vs 10 (with appropriate fatigue DRM's). Successful first aid or medical skill rolls will give the shock victim a -2 DRM on its recovery roll.

A failed shock recovery roll for characters with a fatigue DRM of +4 or higher inflicts a further 1D3 of shock on the character. If it is still alive, another roll may be made once the requisite time has passed.
ADVENTURE DESIGN

While ALBEDO can be played in the traditional "shoot-em-up" style of all other role playing games, this is an inadequate use of the ALBEDO rules. The rules for inter-personal relations and character development allow ALBEDO to be run in a very different manner. The idea of an "alternative role playing concept" was a major factor in the design of these rules, and I sincerely hope that you avail yourself of all the possibilities of this game system.

ALBEDO adventures should have the elements of a good science fiction story. Most of all, it should be entertaining. Plot, building tension and atmosphere are major elements of play, but umpires should remember that very simple things can sometimes make or break an adventure. A well depicted N.P.C. or a sudden digression from normal play (an unexpected problem or a flashback) can create a surprising amount of enjoyment.

Player characters.

An adventure is based around its protagonists, the player characters. Both umpire and players must have a clear idea of the talents, personalities and limitations of the player characters before beginning an adventure. The adventure should then be designed to both challenge and develop the characters.

This game is set in the "Erma Felna, E.D.F." scenario written by Steven A. Gallacci. As such, the rules contain a great deal of information on the armed forces of the ConFed (particularly the E.D.F.). It should be understood that it is not the designer's intention to force players and umpires into structuring their games around characters who are serving in the E.D.F. - in a universe as rich and varied as that of ALBEDO, there should be no reason for such constraints. Characters who are serving soldiers should be all part of a team (ie a starship or vehicle crew) as dictated by the umpire's planned scenarios. Civilian groups may be looser in composition, and are a lot of fun to play.

Atmosphere.

Before beginning to plan an adventure, the umpire should have an idea of the sort of feeling that he wants to get across to the players. This atmosphere should be kept at the forefront of your mind while you think about the actual elements of the adventure, and will govern the descriptive language that you use during play. A good adventure should be involving because of the feelings that it communicates.

Plot.

The umpire will now have to work out a general story line for the adventure. Like any type of story telling, an adventure will tend to build itself once it gets going. The umpire will still need a good idea of what major events and scenarios will occur, and a stock of ideas for minor tasks and problems to introduce to occupy the players.

The ALBEDO background material provides the umpire with the opportunity to create thought provoking adventure. A clever plot line could cause issues which will cause players to deliberate and question their own values. One of the main messages of the Erma Felna story has been that "ideals should not be compromised for the threats of the moment" (Steve deals mostly with the constitutional side of this, while I favour the personal one). Adventures where players will be tested as to their abilities to uphold their ideals over their immediate needs are interesting if your players will go for it.

Umpires might find it useful to conceive of their adventures as falling into three distinct, progressive parts:

a) Character development: Start laying out the beginning elements of the adventure plot. The characters will be introduced to their situation and environment. The opportunity now arises for the characters to interact with the N.P.C.'s who inhabit their immediate world and develop relationships with them (either good or bad). The characters' self confidence may suffer or increase depending on how well they interact with the people and environment around them.

A number of tasks, events and minor crises/decisions will appear. At this stage the player characters will be presented with tasks, events and data which will not be fully understood, and which may seem unconnected. Throwing the player characters together with people whom they like or hate, and the opportunity to perform well or badly in moments of crisis in front of others will all be important to the development of the character's psyche.

b) Crisis: A major crisis (which has probably been building up all this while) should now take place. This will both provide a severe test of the player's wit and skill, and test the character's newly developed relationships and self image. The character's relations with its colleagues, the self confidence (or lack thereof) that it has developed and the responsibilities that it has acquired should all effect the outcome of the adventure.
c) Denouement: With the major events and their immediate consequences out of the way, it is time to wrap up all of the loose ends. Rewards and punishments, summaries of "off screen" events is one technique for ending an adventure. Another is to immediately rip the characters out of the current situation and drop them into something new. The long range results of the player character's actions may suggest guidelines for future events.

Supporting characters.
In a properly constructed ALBEDO adventure, a large file of N.P.C.'s will be needed. Opponents, helpers and background characters must be created as needed, and recorded down if it seems that the player characters will meet them again. Use the disposition chart to make N.P.C.s come alive.

The lack of "monsters", alien beasties and "wacky" environments in ALBEDO will cause campaigns to be oriented towards urban or space based adventures. The basic premise of ALBEDO is that people are the major part of the game environment, so use them to give colour and complexity to a world rather than odd atmospheres and carnivorous wildlife.

Useful concepts.
Non destructive activities: Players must be encouraged to have their characters fulfil themselves in non destructive ways. Players could have their characters engage in intellectual activities such as publishing work in the net (poetry, essays, games). They can also engage in sports (break up the heavy brain work of an investigation with a practice bout of stick fighting - yeah!) A good adventure needs variety and background, just like any decent story.

Time: Most role playing adventures will be organised on a day by day/event by event linear progression. Time may be "contracted" by summarizing tedious or irrelevant events. On the other hand, crucial time periods will be handled in great detail (eg. combat or delicate tasks).

One literary "time trick" which role playing adventures usually ignore is the flash back. A flash back creates a situation where play jumps back in time to determine the flow of past events. Flashbacks can make an interesting digression from normal play, and can be useful for creating prior relationships with other characters.

Punitive duty: The E.D.F. is fond of punishing misdemeanours with punitive duties. Characters who have offended the powers that be might find themselves assigned to doing the tasks that no-one else wants.

N.P.C GENERATION CHART.
As an aid for struggling umpires, we also provide the following random chart which may be used to quickly provide racial types for casual encounters.

<table>
<thead>
<tr>
<th>Dice roll (1D100)</th>
<th>ANIMAL TYPE</th>
<th>57-65</th>
<th>66-68</th>
<th>69</th>
<th>70-71</th>
<th>72-73</th>
<th>74</th>
<th>75-76</th>
<th>77-82</th>
<th>83-84</th>
<th>85-89</th>
<th>90</th>
<th>91-92</th>
<th>93</th>
<th>94</th>
<th>95</th>
<th>96-98</th>
<th>99-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-05</td>
<td>Bear</td>
<td></td>
<td></td>
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<tr>
<td>06-07</td>
<td>Beaver</td>
<td></td>
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<tr>
<td>08</td>
<td>Camel</td>
<td></td>
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</tr>
<tr>
<td>09-18</td>
<td>Cat</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td>91-92</td>
</tr>
<tr>
<td>19</td>
<td>Cow</td>
<td></td>
<td></td>
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<td>38-39</td>
<td>Duck</td>
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<td>52-55</td>
<td>Horse</td>
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<td></td>
<td>&quot;other&quot;</td>
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</tbody>
</table>

For a casual encounter, simply generate the type of creature the player character's have bumped into, and determine the creature's disposition. If the player characters are going to have to do any real business with the N.P.C., then 2D6+3 should be rolled to determine the N.P.C.'s REASON score. Other characteristics should be generated if the N.P.C.is going to become a frequently encountered character.
Role playing hints.
The random result chart: Hidden amongst ALBEDO’s charts and tables is a strange little item marked “Random result chart”. This is designed as a role playing aid, finally formalising an age old technique which goes hand in hand with the “top of the head” school of umpiring. Whenever the umpire wishes to determine the result of an action or event which is more influenced by luck or random chance than skill, a roll can be made on the random result chart to get some idea of ensuing events. With a little imagination the random result chart can be used for everything from checking to see whether the characters get a parking ticket to seeing the results of showing a security guard a set of forged papers. Needless to say, all such rolls are made in secret and are definitely not to be shown to the players.

RANDOM RESULT CHART
(A GENERIC ROLE PLAYING AID)

<table>
<thead>
<tr>
<th>DICE ROLL</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Best possible result</td>
</tr>
<tr>
<td>11-10</td>
<td>Good result</td>
</tr>
<tr>
<td>9-5</td>
<td>Average expected result</td>
</tr>
<tr>
<td>4-3</td>
<td>Bad result</td>
</tr>
<tr>
<td>2</td>
<td>Worst possible imagined result</td>
</tr>
</tbody>
</table>

Non player character records: Many games will take place in fairly close environments, and it is useful to have the characters develop relationships with people around them. Many games will benefit from the creation of a non player character folio. Whenever the player characters run into an N.P.C. with which they may have dealings again in the future, write the details of the character down on a record card for future reference. The card should detail ties and antipathies formed with player characters and other N.P.C.’s, and any relevant information such as, business deals, grudges and the like. Thus a growing collection of incidental acquaintences, enemies, subordinates and friends can be created, which will add a great deal of depth to an on-going campaign.

Harlequins: One method which can be used to add more variety to play is the use of a person aiding the umpire whose sole responsibility is the running of non player characters. Dubbed the “harlequin”, such players can add a lot of spice to play, but must be carefully chosen. If the harlequin is not an imaginative and responsible person, then more harm will be done to the game than good.

In order to use a harlequin, simply roll up the dispositions of an N.P.C., decide on its ties and antipathies which are relevant to the situation, detail out any useful equipment which the character has access to, and brief the harlequin on how you want the character to be run. Give the harlequin full control over the character, but feel free to assist the harlequin however you deem appropriate. As umpire, you have the right to veto any of the harlequin’s actions, but this should not be necessary if you chose your harlequin player carefully to begin with.

For ease of reference, we now repeat the random character dispositions chart. Make two rolls on 1D10, 1D20 or 1D10+10 on the chart below:

Random disposition determination.

<table>
<thead>
<tr>
<th>Dice Roll</th>
<th>Disposition</th>
<th>Disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/11</td>
<td>Cautious/Reckless</td>
<td>Paranoid/Manic</td>
</tr>
<tr>
<td>2/12</td>
<td>Polite/Vulgar</td>
<td>Sycophantic/Obscene</td>
</tr>
<tr>
<td>3/13</td>
<td>Exacting/Vague</td>
<td>Perfectionist/Apathetic</td>
</tr>
<tr>
<td>4/14</td>
<td>Generous/Greedy</td>
<td>Wasteful/Miserly</td>
</tr>
<tr>
<td>5/15</td>
<td>Talkative/Laconic (reserved)</td>
<td>Hysterical/Mute</td>
</tr>
<tr>
<td>6/16</td>
<td>Kind/Cruel</td>
<td>Saintly/Diabolical</td>
</tr>
<tr>
<td>7/17</td>
<td>Responsible/Irresponsible</td>
<td>Fanatical/Amoral</td>
</tr>
<tr>
<td>8/18</td>
<td>Modest/Conceited</td>
<td>Antisocial/Messianic</td>
</tr>
<tr>
<td>9/19</td>
<td>Straightforward/Devious</td>
<td>Callous/Treacherous</td>
</tr>
<tr>
<td>10/20</td>
<td>Friendly/Cynical</td>
<td>Amorous/Psychopathic</td>
</tr>
</tbody>
</table>
STAR SYSTEMS.

When an adventure takes place in an inhabited star system, the umpire should form a clear idea of the environment in which the characters will be operating. Aside from such physical details as the type of stellar primary and the general physical layout of the star system, inhabited star systems will need careful notes on the local society, politics and local attitudes to important topics.

The adventures included with the basic game are set in the TLAKATAN system. This system is detailed below. Readers who are fans of the ERMA FELNA, E.D.F. story should already be familiar with the EKOSIAK system, and can perhaps draw a few interesting contrasts between these two outworlds.

THE TLAKATAN SYSTEM.
SYSTEM NAME: TLakatan
STELLAR PRIMARY: K2 (Orange)
NUMBER OF PLANETS: 7 (2 gas giants)
OTHER ELEMENTS IN SYSTEM: Misc. comets
POPULATION: Xacho (TLakatan 2), 21 million
(open environment),
Chalka (TLakatan 6), (closed environment) 500.
SPHERE OF INFLUENCE: ConFed
SUPPORT %: 60. Growing unrest.
DISPOSITION: Talkative, Straightforward

General description. Xacho (TLakatan 2).
Day period: 27.3 standard hours
Gravity: 1G
TLakatan 2 has a de-centralized population which is
dispersed into numerous small communities. Xacho
boasts one major concentration of population, the city
of Nisha (pop 5 million). Xacho's high orbit is home to
a large zero-G structure which acts as a zero-G
factory, starport and shipyard.

Xacho's climate is fairly mild. Only the equatorial belt
is inhabited (the population is confined to a single
continent), and this zone typically has temperatures
of about 26°C. The pleasant climate is somewhat
marred by an extended rainy season at the end of
summer, when thick fogs and torrential downpour
drive everyone indoors for several weeks. Typical
weather for the rest of the year oscillates between
sun and showers. The local mosses and algae have
mixed well with imported trees and shrubs to make
an unusually verdant ecology. Dominant terrain
features in the regions close to Nisha are hillocks,
rivers and small streams. Most open ground is
covered by a tough, springy moss, which thrives in
the damp climate. Imported grasses do not yet
compete.

Chalka (TLakatan 6).
A small mining base on an inhospitable ammonia/
methane world. Valuable deposits of minerals,
radioactives and rare earths keep teams mining
volcanic flows - dangerous but profitable work. The
cramped working conditions and oppressive gravity
(circa 1.2 G's) cause a high turn over of base
personnel, which rotate back to the homeworld on a
regular basis. The mines are currently being
developed as a potential export industry.

Other activity in the system includes outposts on the
moon of Xacho (Tindo) and in the cometary halo.

BACKGROUND INFORMATION:
TLakatan was initially colonized some forty years ago
by independent groups sponsored by the governments
of 2 secondary colony worlds. TLakatan became a
haven for the unorthodox and the independent, and
attracted a very diverse set of initial colonists. The
firm local belief in planetary independence lead to
TLakatan's early entry into the ConFed, and small
contingents of TLakatanii troops served with
distinction during the first stellar war. It was during
this conflict that TLakatanii soldiery gained their
reputation for independent, emotive conduct and
ruthless efficiency.
Tlakatan today has seen substantial changes over the last generation. The famous attitude of independence has led to a politically active population. Recent protests and public debate has revealed a small but vocal separatist faction which resents the ConFed influence on planet and fears the introduction of stronger controls by ConFed central. The ConFed diplomatic service lists Tlakatan as socio-politically volatile.

Tlakatan has only recently acquired "state of the art" technology. Tlakatan is a capitalist world, but a strong sense of community involvement has lead to the public ownership of most essential services.

Tlakatan is a closed democracy (a democratic society in which not all inhabitants have the vote). Tlakatanii law requires its voting citizens to meet set standards of general education and current affairs awareness before they are allowed franchise. The examinations which determine a person's suitability to hold the vote include simple tests of current affairs knowledge - most full Tlakatanii citizens will have a current affairs knowledge of at least 5 and an advanced education of at least D. Only full voting citizens are allowed to become members of the Tlakatan home guard, although there is a small part time peoples' militia which accepts the non-voting public.

Tlakatan has just emerged from a major modernization program. In the wake of receding enthusiasm for technical development, political turmoil is starting to appear as Tlakatan's commitment to the ConFed is beginning to be questioned. Tlakatan is a free thinking community which does not have the elaborate security procedures found on many worlds, and thus an upsurge of terrorism is feared in the recent future.

The Tlakatanii population speaks almost pure standard, and is easily understandable by anyone, although the locals use a gemanic or french style accent. The "typical" Tlakatanii will abhor the concept of close security monitoring, and is very conscious of his privacy. Locals can be quite touchy about personal questions - an individual's business is seen as his own business! The difficult period of Tlakatan's early colonisation has removed any hint of overt "sexism" from the Tlakatanii's personal attitudes (no discrimination and no deference).

Tlakatan sometimes seems to fulfill the centralist vision of a "worst case" outworld. The government and social environment actively encourages dissent, and a lax set import/export controls gives Tlakatan 2 an active underground trade network.

The Tlakatanii Homeguard.
The local Homeguard has a difficult reputation to live up to, and so indulges in a fair bit of posturing in its spare time. Tlakatanii delight in giving a hard time to off-planet consolidated tactics instructors, but will be quick to respect anyone who passes their test. Their strong emphasis of comrade loyalty and independence can take a while to get used to.

Tlakatan's homeguard is fiercely loyal to the planet, but is rife with the same divisions of opinion currently spreading through the populace. The local Homeguard currently consists of some 10,000 troops, supported by about as many part time militia. In light of the recent flare-up between the ConFed and the I.L.R., the local military is beginning a recruiting drive.

Equipment: Dress uniforms consist of sturdy moss green suits topped off with a glengarry. Field dress utilizes the standard ConFed military helmet marked with the Tlakatanii "flash", and are often worn over a loose rain hood. Uniforms include shoulder mantles and other water proofing features. The Homeguard is used to operating in a mixture of open hills and close terrain, and so uses a proportion of long rifles in its infantry squads. Local specialised vehicles include hovercraft for patrolling rivers and marshy lowlands.
Sample characters.
For those people who are familiar with the "ERMA FELNA, E.D.F." story in Steve Gallacci's ALBEDO comics, I shall now include Erma's statistics in game terms, allowing players to draw a comparison between her and their own characters.

Name: Felna, Erma - EDFSN 575 395 2020
Rank: Commander, E.D.F. Tac aerospace command (rank grade 3)
Born: 171-01-22, Anniahport, Annah (Dornthant II)
Racial type: Feline (Cat)
Frame size: Light

Strength: 8
Stamina: 10
M. Dexterity: 12
Co-ordination: 12
Reason: 13
Intuition: 10
Drive: 13
Stability: 12

Disposition: Responsible, Straightforward
S.P.I. rating: 4.0

Skill gradings:
Aerospace pilot: B
Aerospace aircrew: C
Combat weapons: D
Command: C
Advanced education (physical sciences & politics): B
Martial arts: D
1 career point was used to purchase miscellaneous skills. Erma's assorted social skills include mingle and dancing.

Specialist rating (Aerospace pilot): Spec 4
Erma has devoted herself to a professional role, and lacks skills in other areas.

Description:
Erma stands c.140cm's in height, has light gold-brown fur (slightly paler in front), dark red-brown head hair and green-gold eyes. Unlike many felines, she has only the barest stub of a tail.
Encouraged into a career in Aerospace from an early age, Erma was educated at the Homeguard academy on Dornthant. Erma entered the E.D.F., receiving her command and aerospace training at the E.D.F. academy on Danet. While in training, Erma distinguished herself by neutralizing a terrorist sniper, receiving awards for bravery and initiative.
Erma was engaged in combat during the Derzon campaign, where she lost her vehicle to enemy fire and was later wounded during a ground engagement.

Upon recuperating, Erma ran afoul of a sexist faction within the E.D.F. command which conspired to remove her from combat duties. This ploy was thwarted by more responsible officers (backed by the net), who managed to have Erma transferred to the socio-politically volatile world of Ekosiak, where her talents would be of use.
As a good example of the sort of background that characters can have, I will also include the specs for Erma's friend Dea-Htuhok:

**Name:** Kho, Dea-Htuhok - CSSN 575 827 8489  
**Rank:** Assistant secretary, ConFed diplomatic corps (civil service grade 7).  
**Born:** 168-07-12, Encho city, Annah (Dornthant II)  
**Racial type:** Vulp-Lupine (canine)  
**Frame size:** Average

- **Strength:** 9  
- **Stamina:** 9  
- **M. Dexterity:** 11  
- **Co-ordination:** 10  
- **Reason:** 12  
- **Intuition:** 12  
- **Drive:** 11  
- **Stability:** 10

- **Disposition:** Polite, Responsible  
- **S.P.I. rating:** 4.1

**Skill gradings:**  
- Political studies: A  
- Diplomacy: B  
- Administration: B  
- Combat weapons: D

1 career point was used to raise Dea's literacy skill, and one point was used in leadership training.

**Description:**  
Dea stands c.155cm's tall, has a tail and a rich red/brown coat with a near-white ventral countershade. She has gold green eyes (Note: Dea makes a good contrast with Jenna Shodi, another female fox, but of a different species. Jenna is of a shorter, lighter build, and has digitigrade leg articulation. See the illustration of her on page 16 of book 1).

Dea's primary education was provided within her extended family, the clan Aldan-Kho, who trained her to pass her Dornthantii Homeguard equivalency at SD 184-11-30. The clan sponsored her through the ConFed civil service apprenticeship program in Dornthant and Danet. Dea served with distinction on the staff of the Enchawa ConFed office from SD 190-02-01 to SD 192-09-20, and then transferred to Ekosik to act as assistant to ConFed secretary Shato. Dea is currently a detached member of the clan Zha-Kho of Tochtah (Dornthant 6), but she still maintains a connection with Aldan-Kho, and is sponsoring several cousins into ConFed and E.D.F. service.

Dea's personal interests parallel her professional ones. She studies sociology and political science, and has several significant essays in the Net.

Both Dea and Erma hail from the Dornthant system. The Dornthantii accent is quite pronounced, and is easily recognized. When speaking between themselves, Dornthantii will drop into a thick vernacular which is almost impossible for non Dornthantii to follow.
Name: Toki - EDFSN 213 395 5010
Rank: Commander, E.D.F. Staff
Born: 172-12-02, Settlement city, Charanx (Danet 3).
Racial type: Mouse
Frame size: Small

Strength: 5
Stamina: 11
M. Dexterity: 14
Co-ordination: 13
Reason: 12
Intuition: 14
Drive: 12
Stability: 9

Disposition: Friendly, Straightforward
S.P.I. rating: 4.1

Skill gradings:
Administration: A
Command: C
Aerospace aircrew: B
Combat weapons: D
Advanced education: B (Arts)
2 career points were used to raise Toki's social skills.

Description:
A strikingly warm and irrepressible character, Toki stands 116cm's tall. Her fur colour is light silver-grey, fading to near white on the ventral surfaces. Her eyes are a bright green, and she has prominent facial whiskers.

An old friend of Erma's from their academy days, Toki's initial basic education was in civilian institutions rather than military schools. She also lacks Erma's military family background. Toki has thus had to deal with a greater diversity of people than her friend Erma, and is far more at ease in social situations.

Toki has spent the last few years in a staff admin slot with the C.F.C., but has recently found herself conveniently co-assigned with her friend Erma in a squadron command position. Toki is an excellent administrator, and is not afraid to utilise unconventional methods. Though psychologically capable of combat, her temperament and training fit her for staff positions.
AFTERWORD:
This game was written for a number of reasons. While the initial concept was to produce a decent game system in reaction to a number of very average games which have appeared over the last few years, this was not enough reason to burden the world with yet another role playing game. The impetus to produce the game came from my discovery and obsession with Steven A. Gallacci's stories, and the realization that other people out there feel the same way. Fans of the Erma Felna story should find the background material enlightening, since only a small amount of the background information included in the game can be deduced from the comic strip (though fans who have carefully combed through the ALBEDO letters columns and COMMAND REVIEW editorials will have a better idea of the scenario background). I suggest that you now carefully re-read the story keeping the additional background material in mind. Fans will also recognize the bulk of the internal illustrations as panels from "Birthright" and "Erma Felna, E.D.F." - nothing serves better to illustrate the ideas behind the text.

The game has been designed to be more thoughtful and less oriented towards violence than the normal run of R.P.G.'s. With the exception of classic pieces of writing such as M. A. R. Barker's "Empire of the Petal Throne", most science fiction games refuse to provide the reader with any sense of background, but instead leave the player to his 20th century mind set. In ALBEDO, I have taken an inordinate amount of time to detail out the history, culture and psychology of the alternative society proposed by the "Erma Felna, E.D.F." scenario. The equipment, weapons and game system of ALBEDO have been designed to conform to the Erma Felna universe. Thus ALBEDO is unusual in restricting itself to a rigidly defined bracket of technology and culture. It is hoped that the depth of the background material will make readers see this as an advantage rather than a limitation. "Erma Felna" was designed to be a thought provoking story, and I hope that the game will live up that mark.

As a closing note, these rules owe a great debt to three ladies. Firstly to my wife, Christine, who is ever a source of encouragement and sensible ideas. Secondly to Ms Jenna Shodi, the gorgeous, plucky little fox with the musical Frantiran accent who started me on my ongoing love affair with Steve Gallacci's work. And finally to Commander Erma Felna of the E.D.F.'s aerospace command, whose adventures provided the inspiration for this game. Erma will forever have a special place in my heart - this game has been a work of love, and I hope I haven't let her down.

May your wits ever remain sharp, your eyes bright and your tail bushy,

Paul Kidd.
PICKING UP THE PIECES

When Paul wrote the text to the game, he did so after nearly a year of play testing and general de-bugging, and had become very familiar with all the fussy details. And, while he mentioned all the functions necessary to get things done, he didn't always put them together in the easiest to follow form. Fortunately, the rule books were not assembled at the same time, which allowed us to consolidate the loose and murky bits into these following pages.

SKILL ABILITY CHART

Part of the character generation sequence. Refer to page 40, book three, and pages 37 through 39 in book one.

<table>
<thead>
<tr>
<th>Training/Experience level.</th>
</tr>
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<tr>
<td>1  2  3  4  5  6  7  8  9  10 11 12 13 14 15</td>
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</tr>
<tr>
<td>2  0  0  1  1  1  1  1  2  2  2  2  2  3  3  3</td>
</tr>
<tr>
<td>3  0  1  1  1  2  2  2  2  3  3  3  4  4  4  5</td>
</tr>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
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</tr>
<tr>
<td>9  1  2  3  4  5  5  6  7  8  9  10 11 12 13 14 15</td>
</tr>
<tr>
<td>10 1  2  3  4  5  6  7  8  9  10 11 12 13 14 15 16</td>
</tr>
<tr>
<td>11 1  2  3  4  5  7  8  9  10 11 12 13 14 15 16 17 18</td>
</tr>
<tr>
<td>12 1  2  4  5  6  7  8  10 11 12 13 14 16 16 17 18 19</td>
</tr>
<tr>
<td>13 1  3  4  5  7  8  9  10 12 13 14 15 16 16 17 18 20</td>
</tr>
<tr>
<td>14 1  3  4  6  7  9  10 11 13 14 15 17 18 20 21 23</td>
</tr>
<tr>
<td>15 2  3  5  6  8  10 11 12 14 15 16 18 19 21 23</td>
</tr>
</tbody>
</table>

METHOD:

Cross index the character's ability governor with its training level to yield the character's ABILITY SCORE.

This chart can also be used as a swift means of determining the damage caused by a melee weapon. Average the character's strength with its skill with the melee weapon, and cross reference this with the weapon's damage rating to find the actual damage done.
SHOT DIFFICULTY CHART

Here's the charts covering weapons fire, as covered on page 18, book three.

Basic shot difficulty by range:

<table>
<thead>
<tr>
<th>RANGE</th>
<th>Normal Ammunition</th>
<th>Dart Ammunition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Short</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Medium</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Long</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Extreme</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

To hit a target with missile fire, roll the firer's skill vs the target difficulty on the comparison chart.

DICE ROLL MODIFIERS

Target status

- Target is Sprinting or evading +1
- Target is a large, stationary vehicle -1
- Target is a fast moving vehicle (50 kph+) +2
- Target is a vehicle within 20 meters -2

Firer's movement

- Firer running +1
- Firer sprinting +2

Type of aim

- Target partially obscured +1
- 2 consecutive actions spent in aiming this shot -2
- Controlled burst at medium or long range -1
- Wild burst at close range -2
- Wild burst at short range -1
- Rapid fire +1

Unaimed fire penalties

- Laser equipped to 40 metres +1
- Laser equipped to 60 metres +2
- Non laser equipped to 40 metres +2
- All other unaimed fire +3

Unaimed fire at ranges in excess of 200 metres will miss.

Roll on the weapons breakdown chart whenever an unmodified roll of 12 is made on any roll to hit.

Weapons breakdown chart:

Roll 2D6
2-7 No effect.
8-10 Stoppage - 1 action required to clear round from chamber.
11-12 Jam - Roll M.Dex vs 10 to clear the weapon.

Once a hit has been scored, determine hit location, damage results, shock results and blood loss.

Missile weapons hit location:

<table>
<thead>
<tr>
<th>Dice roll</th>
<th>Location struck</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2</td>
<td>Head</td>
</tr>
<tr>
<td>3,4</td>
<td>Arms</td>
</tr>
<tr>
<td>5,6</td>
<td>Chest</td>
</tr>
<tr>
<td>7,8</td>
<td>Abdomen</td>
</tr>
<tr>
<td>9,10</td>
<td>Legs</td>
</tr>
</tbody>
</table>

Hits to the head roll another D6:

<table>
<thead>
<tr>
<th>Front</th>
<th>Side</th>
<th>Rear</th>
<th>DRMs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skull</td>
<td>Skull</td>
<td>Fired at from below: +1</td>
</tr>
<tr>
<td>1</td>
<td>Skull</td>
<td>Skull</td>
<td>Fired at from above: -1 or -2</td>
</tr>
<tr>
<td>3</td>
<td>Skull</td>
<td>Skull</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>U. face</td>
<td>Skull</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>L. face</td>
<td>Skull</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Neck</td>
<td>Neck</td>
<td></td>
</tr>
</tbody>
</table>
ACTION SEQUENCE CHART

These charts support the text from page 15 book three, discussing combat action.

<table>
<thead>
<tr>
<th>ORDER OF ACTIONS</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Phase</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>X</td>
</tr>
</tbody>
</table>

Wherever an "X" appears, the character receives an action.

When two characters both have actions occurring simultaneously the character with the highest initiative rating acts first (roll initiative dice). If an initiative tie occurs, both actions are performed simultaneously.

POSSIBLE ACTIONS:
The actions which a character may perform in one of its action phases include the following:
- Aim a weapon
- Communicate
- Drive vehicle
- Fall prone
- Fire a weapon
- Load a magazine into a weapon
- Melee combat
- Observe
- Prime grenade
- Remove an empty magazine from a weapon
- Stand up
- Throw a grenade

FIRE PROCEDURE:
1 - Decide type of fire to be made (single shot, controlled burst, wild burst).
2 - Roll to hit.
3 - Roll hit location (best done simultaneously with the character's roll to hit).
4 - Roll to penetrate armour (if any).
5 - Roll for damage effects on target.
6 - Roll for shock effects on target.

Initiative dice determination.

<table>
<thead>
<tr>
<th>Character's Intuition</th>
<th>Type of dice rolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 to 8</td>
<td>1D6-1</td>
</tr>
<tr>
<td>9 to 11</td>
<td>1D6</td>
</tr>
<tr>
<td>12 to 13</td>
<td>1D6+1</td>
</tr>
<tr>
<td>14 to 15</td>
<td>3D3</td>
</tr>
</tbody>
</table>

Firearm handiness ratings.

<table>
<thead>
<tr>
<th>Handiness category</th>
<th>Initiative modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very handy</td>
<td>0</td>
</tr>
<tr>
<td>Handy</td>
<td>-1</td>
</tr>
<tr>
<td>Cumbersome</td>
<td>-2</td>
</tr>
<tr>
<td>Very cumbersome</td>
<td>-3</td>
</tr>
</tbody>
</table>
CHARACTER GENERATION FLOW CHART:

1) First comes the fun bit! Select your character's race. See pages 16 to 22 of book one for the list of sapient races.

2) Dice time! Roll the character's species based characteristics (Strength, Stamina, Manual Dexterity, Coordination and Stability). These characteristics are rolled on the chart on book 24 of page one. You will need to refer back to the lists of character races from pages 17 to 22.

3) Roll the character's Reason, Intuition and Drive characteristics on 2D6+3.

4) Work out the character's Maximum recoil rating, Actions per turn and initiative dice by referring to the charts on pages 24 and 25 of book one.

5) Create the beginnings of a personality for your character by rolling its Disposition on the chart on page 26 of book one. Feel free to make any other notes that you think might make your character more realistic or entertaining.

6) Record the character's basic skills as listed on page 32, book one. This process is done in three stages, all of which are detailed on the same page.

7) Decision time again! Choose a career for your character. See pages 32 to 36 of book one for a list of guidelines and suggestions.

8) The character has 12 career points to spend on developing its professional skills. Use these points to purchase skill packages as shown on pages 29 to 31 of book one. Page 28 of book one also shows how career points may be spent on raising individual skills.

9) The character now spends a further career point on buying skills relevant to a hobby, sport or side interest.

10) Now comes the tedious bit. Work out the character's skill ability scores for all of its skills. This is done by cross indexing the character's governor with each skill with the skills training level on the skill ability chart on page 37 of book three. The governors for each skill may be found on pages 37 through 39 of book one.

CONGRATULATIONS! You now have a character!

In order to put the final polish on your alternate persona, you might need to finalize some details as to the character's actual rank and position. The character should also roll up its ties and antipathies as shown on page 10 of book three.
The game, as previously mentioned, is based on the story *Erma Felna, EDF* in the comic ALBEDO, Anthropomorphics. If you’re interested in the original, as well as other comics which also have alternate animals, rather than traditional comic or cartoon funny animals (like the various Disney comics and others), we’ve listed a few below. Much of the inspiration of *Erma* and ALBEDO, especially the idea of a “funny animal” science-fiction story, done in black and white, and self-published, came from what had come before. I’d been reading and collecting various underground and then the new so-called “ground level” comics in the seventies and the idea of doing similar work myself took hold. While no one title or artist was the direct inspiration of what was eventually to become ALBEDO, several stand out and could be of interest to the reader. First among them is Vaughn Bode, and his various wizards, lizards, and ladies, which are fortunately by and large still available in reprints, such as DEADBONE EROTICA, and various issues of JUNKWAFFLE. Earlier editions and other material are too many too mention but worth pursuing, and his son, Mark, has picked up where his father left off. Robert Crumb and his FRITZ THE CAT, and innumerable other works, is of major significance in the seriously underground genre. His, and other work can also be found in the infamous ZAP and SNARF underground comics, though only the earlier issues were my favorites. More directly influential was the Star-reach line of “ground-level” comics, which presaged the current alternate press industry by nearly a decade. STAR+REACH, an anthology science-fiction and fantasy comic and QUACK, their funny animal book, were my favorites of the time, and highly recommended if they can be found.

Another funny animal book of the time was NO DUCKS, the title of which was inspired by the rash of duck characters, no doubt brought on by the resurgent interest in Carl Bark’s *Donald Duck* stories and Steve Gerber’s HOWARD THE DUCK. NO DUCKS nr. 1 had what I still consider one of the best comic stories ever written, the adventures of Cap’ and Crew of the Bunn E, whose artist and writer I can’t remember, and my copy of the book is buried in storage, but it’s great! And might be available in reprint somewhere (?). Speaking of which, the original HOWARD THE DUCK was also a favorite, at least the first dozen issues or so. Last, and worth an awful lot of indirect credit, more for the idea of independent publishing, but is still a recommendable book, even without having funny animals, is Wendy and Richard Pini’s ELFQUEST. Yeah.

Now I get to rattle off various current titles that fall into, broadly, the related anthropomorphic genre. There’s a lot not mentioned, like the Disney titles and various comic adaptation of cartoon products, mainly because such falls into a separate funny-animal category, still worth checking out, but has little in common with these. Then there’s other stuff I haven’t seen or have forgotten, and lastly and worth looking for, are the various fanzines that specialize in funny animals and related stuff. The quality varies wildly, but there’s interesting material out there. For a good place to find out more about the small press and fan press world, see THE COMICS FANDOM EXAMINER (COMICS F/X): P.O. Box 95968, Seattle, WA 98145-2968.

THE ADVENTURES OF CAPTAIN JACK, kind of screwball space opera, different and interesting. Fantagraphics Books: 1800 Bridgegate St., Suite 101, Westlake Village, CA 91351.

THE ANIVERSE, S.F. adventure, don’t know a lot about it. Webbee Comix: P.O. Box 7144, Flint, MI 48504.


CRITTERS, funny animal anthology, issues nr. 1-6 and 12-17 include Birthright, a distant sequel to *Erma Felna, EDF*. Fantagraphics Books.

CUTEY BUNNY, very silly, hard to find, but worth it if you do. J.Q. Enterprises: P.O. Box 2221, Hollywood, CA 90078/Eclipse Comics: P.O. Box 1099, Forestville, CA 95436.

THE DREAMERY, not much funny animal but good stuff anyway. Eclipse Comics.

EQUINE THE UNCIVILIZED, a great spoof of sword-wielding barbarians and the spin-off, RED SHELAD is a hit as well. Graphxpress: P.O. Box 32292, Tucson, AZ 85751.

FISH POLICE, hard boiled picene detective. Comico: 1547 Dekalb St., Norristown, PA 19401.

FRANK THE UNICORN, hard to define but interesting, advocating literacy, as do several other titles, worth examining. Fragments West: 3908 East 4th St, Long Beach, CA 90814.

FUSION, only indirectly has anthropomorphics, but interesting science fiction series, co-art and story by S.A. Gallacci. Eclipse Comics.

MORPHS, sort of grab-bag of anthropomorphic stuff. Graphxpress.

SPACE ARK, zany science-fiction adventure. Apple Comics: P.O. Box 787, Bethel, CT 06801.

MENAGERIE, anthropomorphics anthology. Chrome Tiger: P.O. Box 547, Bellevue, WA 98009-0547.


XANADU, romantic fantasy with anthropomorphized mundane and mythological characters. Thoughts & Images.

Finally, to wrap things up, I’ll hype my stuff. ALBEDO, Anthropomorphics, and *Erma Felna, EDF* is available through Thoughts & Images, P.O. Box 15188, Portland, OR 97215. Also available are the collected *Erma* stories which make up COMMAND REVIEW Vol. 1 and 2. There’s all manner of ancillary merchandise also available, though it would be best to inquire, rather than try to list all here. Same thing with additional related gaming products which are already being planned. Direct comments or questions on the game can come to me, Steve Gallacci, at P.O. Box 19419, Seattle, WA 98109, and I can also forward stuff to Paul Kidd, the author of the game, remember?