

TRAVELLER

REACH ADVENTURE 2 : THEORIES OF EVERYTHING



SCIENCE FICTION ADVENTURE IN THE FAR FUTURE

TRAVELLER

REACH ADVENTURE 2 : THEORIES OF EVERYTHING

CREDITS

CLASSIC TRAVELLER

Marc Miller

Loren Wiseman, John Harshman, Frank Chadwick, Darryl Hany, Winston Hamilton, Tony Svajlenka, Scott Renner, Doug Poe, David MacDonald, Wayne Roth, Paul R. Banner.

MONGOOSE TRAVELLER

Author

Martin J. Dougherty

Editor

Matthew Sprange

Layout and Graphic Design

Will Chapman

Interior Illustrations

Amy Perret

3D Model Design

Sandrine Thirache

Special Thanks

Marc Miller, Tom O'Neill, Brian Caball, Aidan Rafferty, Robert Eaglestone, Loren Wiseman, James Maliszewski, Donald McKinley, Constantine Thomas, William Hostman, Martin Costa

CONTENTS

INTRODUCTION	2
REFEREE'S INFORMATION	4
THE INSIGHT III	6
THEORIES OF EVERYTHING	19
HIRING ON	20
MARDUK	22
BORITE	25
RESCUE	28
APPENDIX	37

Traveller ©2016 Mongoose Publishing. All rights reserved. Reproduction of this work by any means without the written permission of the publisher is expressly forbidden. All significant characters, names, places, items, art and text herein are copyrighted by Mongoose Publishing.

This game product contains no Open Game Content. No portion of this work may be reproduced in any form without written permission. To learn more about the Open Game License, please go to www.mongoosepublishing.com.

This material is protected under the copyright laws of the United Kingdom and of the United States. This product is a work of fiction. Any similarity to actual people, organisations, places or events is purely coincidental.

Traveller is a trademark of Far Future Enterprises and is used under licence.



INTRODUCTION

This adventure takes place in Sindal subsector of Trojan Reach sector. It begins on the world of Marduk, in the Oghma Cluster which lies at the Rimward (bottom) end of the subsector, and proceeds into the Borite system. This requires significant time spent in jump, during which the Travellers will be confined to the ship and forced to interact with its dysfunctional group of owners. Missions to worlds along the way may provide welcome relief but will bring new dangers as well. Shipboard skills will be very useful in this adventure, though there is plenty for non-crew Travellers to do. The problems that will confront the Travellers are varied, and can be solved in many different ways.

The adventure is suitable for almost any group of Travellers, though if they have a starship they will need a reason to leave it behind for a time while they work aboard the laboratory ship *Insight III*. There are various reasons why this might be necessary – their own ship might be docked for maintenance or repairs, or they may lack some critical component.

In *Reach Adventure 2: Theories of Everything* the Travellers are hired as crew and research assistants aboard the laboratory vessel *Insight III*. The ship is owned by a cooperative of scientists working in a cross-discipline environment to solve problems and discover knowledge as they journey across the vast reaches of space... or so they claim. In fact, *Insight III* is basically a jump-capable shouting match as its owners bicker, squabble and argue their erratic way across a dangerous subsector.

The Travellers' mission is thus more than merely running the ship and helping collect data. They will need to be advisors, diplomats and bodyguards too, injecting a little common sense into the heady mix of ego and brilliance aboard *Insight III*. The storyline of the adventure is as much about the interactions of the scientists and crew as the situations they find themselves in, and it may be that the Travellers' greatest challenge will be keeping the scientists from murdering one another.

SET UP

The Travellers are passing through the Marduk system for whatever reason, perhaps seeking passage offworld after the events of *Reach Adventure 1: Marooned on Marduk*. If the adventure is to be run as a one-off then why the Travellers are at Marduk does not really matter, but if *Theories of Everything* is to be run as part of an ongoing game then the referee needs to work a reason for the Travellers being there into the game's storyline.

If the Travellers Have a Ship

Emerging from jump in the Marduk system, the Travellers' engineer noted that their jump drive was behaving strangely. This is one of the most frightening things that can happen aboard a starship – a malfunctioning jump drive is the object of almost supernatural dread.

Closer inspection showed that a critical component is on the verge of failure. The part is quite small, forming part of the fuel-feed system for the jump drive, but is a specialist component not usually stocked outside a Class A or B starport. Failures are quite rare; not that this helps much. It would appear the system was not properly adjusted after the last maintenance cycle.

The parts are really not all that expensive as starship spares go. A full replacement set for the entire assembly could be bought new for about Cr25000, or single parts could be scrounged from a wrecker's yard. However, many crews are strongly opposed to using salvaged parts in critical systems like the jump drive. Installing the parts would take a competent engineer a day or so. In short, this is not much of an issue if the parts are available.

The problem is that no such parts are available on Marduk. The nearest source would be the Class B ports at Thebus or Torpol, but getting there is difficult at present. Using the jump drive in its present state would fall into the '*might not die*' category of risks. Ordering

the part means sending a request aboard a passing ship and waiting for one to return, which will take about three weeks at the very least and probably more. Taking passage aboard a commercial ship to go and obtain the necessary components in person pushes the costs up, and of course the Travellers' ship is incurring dock fees the whole time.

A solution has, however, presented itself. The laboratory ship *Insight III* is short-handed and needs both crew and research assistants for a mission that will end at Thebus. The ship's owners are willing to cover the Travellers' dock fees and provide a middle passage for the trip back to Marduk aboard a passenger ship, plus the cost of the necessary component. They will also pay each Traveller a per-diem of Cr100 (i.e. Cr700 per week) to cover minor expenses. Food and lodging will be provided aboard the lab ship. The mission will probably take about four to six

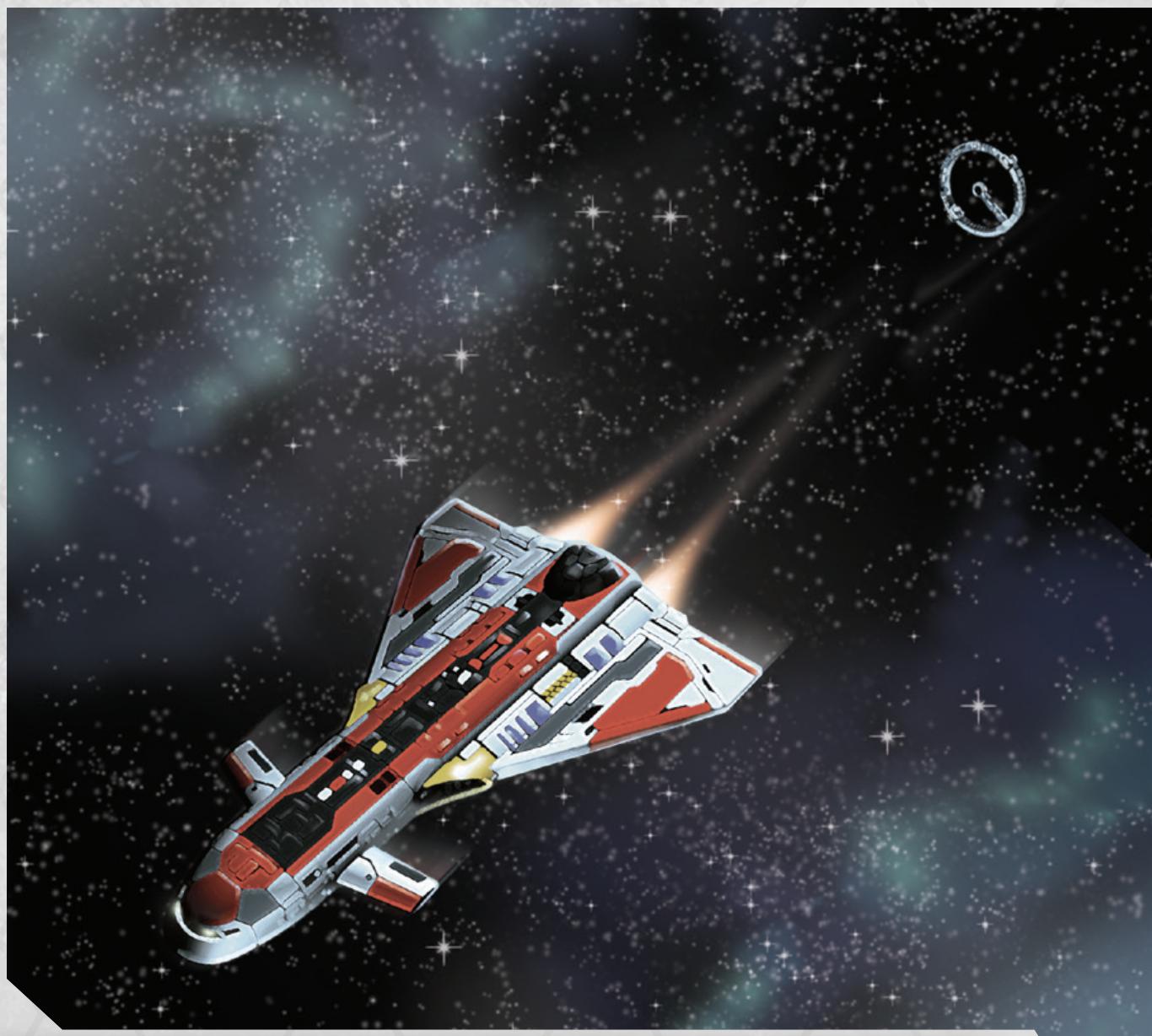
weeks, but by the end of it the Travellers will be back at Marduk with the parts needed to fix their ship, and none of it will have cost them anything.

If the Travellers do not Have a Ship

The job offer is more or less the same, except that upon successful completion of the mission each Traveller will receive Cr10000 in cash plus a bonus if they were involved in something that turns out to be profitable. The per-diem expenses will still be paid.

Referee's Note

Payment, whether the Travellers have a ship or not, depends upon reaching Thebus having made a credible effort at the tasks encountered along the way. Travellers who quit halfway through the mission cannot expect to get paid for it.



REFEREE'S INFORMATION

The following information is for the use of the referee. How much of it is made available to the Travellers, and in what manner, is for the referee to decide. Much of this data is commonly known or available through data terminals, info feeds to Travellers' comms, and so forth. However, the commonly available version may be incomplete, dumbed-down, or wildly inaccurate for all manner of reasons. The referee has the whole story; if the Travellers want accurate information they may have to search for it or use inventive means.

SINDAL SUBSECTOR

Sindal subsector (see also page 230 of the *Traveller Core Rulebook*) was once extremely important in the affairs of Trojan Reach sector, since it was the home territory of the Sindalian Empire which had its capital at Noricum. The collapse of the empire – and indeed much of its reign – was extremely violent, with nuclear and biochemical weapons used both during the final death-throes of the empire and also against rebel worlds during its reign of terror.

As a result, there are remnants of the great Sindalian civilisation across the subsector, often surrounded by wilderness or uninhabitable regions. Many worlds regressed to a level little above barbarism, and some achieved a sort of technological barbarism made all the more nasty by the existence of high-tech weaponry.

Today's Sindal subsector is of little economic importance, though the Sindalian Main (also known as the Dustbelt) runs across the rimward (bottom) end of the subsector and is an important link for starships headed from Imperial space to the Aslan Hierate or the Florian League. This is by no means a safe route; there are pirate havens along the way and worlds whose inhabitants can be extremely unfriendly. It is, however, the most practicable route for ships with jump-2 capability. Faster ships can make a more direct transit but for those that cannot cross a 3-parsec gulf there are few alternative routes.

Marduk

The world of Marduk is fairly Earthlike, and once had a large population. Its cities were devastated in one of the many wars that accompanied the fall of the Sindalian Empire. Various accounts exist of what happened to the population of Marduk; it is likely that all of them contain elements of truth. Radioactive fallout, famine, plagues of natural and unnatural causes and a host of other causes more or less wiped out the population on the mainlands, which became taboo to the locals. Once the mainland population dropped below a critical amount, the remaining people died out over subsequent generations.

Humans did survive on Marduk, but not on the main continents. The surviving populations lived on various island chains and archipelagos, which became isolated from one another and devolved to a lower technological level. Today, these island groups are each home to a few thousand people who have developed separately. Contact with outsiders – including people from other island groups – is shunned, and the islanders have developed very different cultures and dialect that in some cases have become entirely separate languages. Since it is forbidden to learn the tongues of other groups, the divergence continues to this day.

The only contact the islanders have with outsiders tends to be raids from Oghma, which does not encourage them to seek outside contact. As a result the islander populations are extremely insular and have been known to attack visitors on sight. Most groups are not so extreme, but mistrust is inevitable and if possible the locals will avoid contact altogether. A starship landing near one of their villages will usually cause the locals to flee to their hiding places. They have become very good at hiding from raiders, so it is quite possible that visitors might think they have found a deserted village or come away wondering what mysterious disaster depopulated the settlement just before they arrived.

The port at Marduk is the only part of the planet visited by most people passing through. It was built from the ground up (actually from the coastal seabed up) by the General Development Corporation, or GeDeCo, to facilitate trade through the Sindalian Main. The port has a modest orbital component and a larger ground station, and is constructed on an artificial island just off the coast of one of Marduk's continents.

Borite

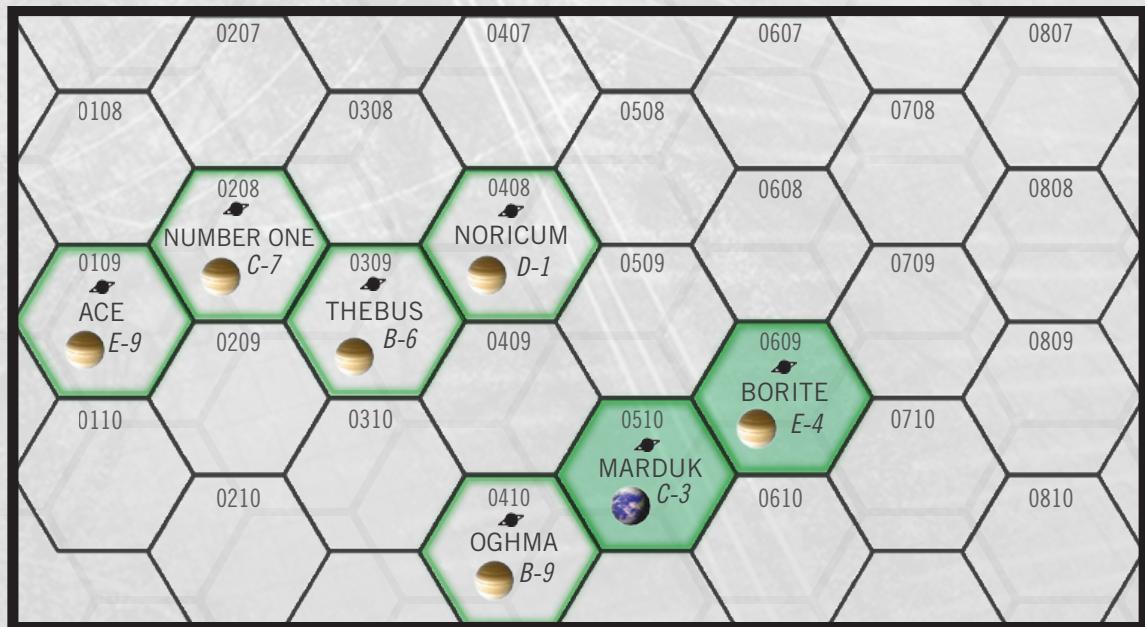
Borite was named for the high concentration of boron-heavy compounds in its surface. Its uninviting yellow-brown appearance is a foretaste of what awaits those few travellers who visit the world. Like most of the worlds in the region, Borite suffered a societal collapse when the Sindalian Empire was destroyed and today is ruled by the Borite Continuity Authority (BCA), a remnant of the old governmental apparatus from before the collapse.

The BCA controls all offworld contact, not that there is much, and attempts to provide at least rudimentary government to the entire planet. With several million people scattered in communities all around the globe, this is beyond the BCA's means although it will not admit it. Regions close to the capital (which is also

the site of what passes for a starport on Borite) are reasonably well controlled but distant areas are more or less independent.

Borite is frequently raided by slavers from Oghma, who particularly target scientists and scholars. For this reason writing is forbidden on Borite except for well-guarded members of the BCA. There are some literate people but they conceal the fact, relying on oral traditions and poetic memory aids to remember important facts. A small but significant number of people on Borite can reel off technical information in poem form, often without really knowing what it means. This fact is concealed from most outsiders, since the best way to avoid being enslaved by Oghman raiders is to appear to be a dumb yokel.

THE DUSTBELT SINDAL SUBSECTOR



Gas Giant

B-6 Starport Class & Tech Level

Fuel Dump

Secure System

Imperial Border

X-Boat Route

Amber Zone

Planet (Dry)

Planet (Water Present)

THE INSIGHT III

Insight III began her career nearly a century ago and almost three sectors away, in the corporate shipyards of Vland sector. She started out as an entirely standard Type-L vessel but has picked up a few quirks after decades of refits, repairs and one fairly serious collision.

The vessel takes the form of a ring, which can be spun to create a simulation of gravity on occasions where the floor plates that normally generate artificial gravity might interfere with a sensitive experiment. In the centre of this ring is a docking port for the ship's 40-ton pinnace which is officially named *Insight III-Pinnace* but is typically known to the crew as *Chubb*. Nobody aboard can remember where this name came from or what it is supposed to mean.

Insight III cannot land on a planetary surface, and relies on *Chubb* to ferry supplies and fuel aboard as well as taking crew groundside. Nominal crew requirement (according to the ship's operating manual) is a pilot, navigator, medic and two engineers but there are many possible crew configurations for a vessel of this kind. For normal operations it is necessary to have two engineers, at least one of whom is a qualified shipboard engineer. The other can be an electronics or computer systems technician who looks after the ship's systems (including her extensive laboratory suite) outside the drive rooms.

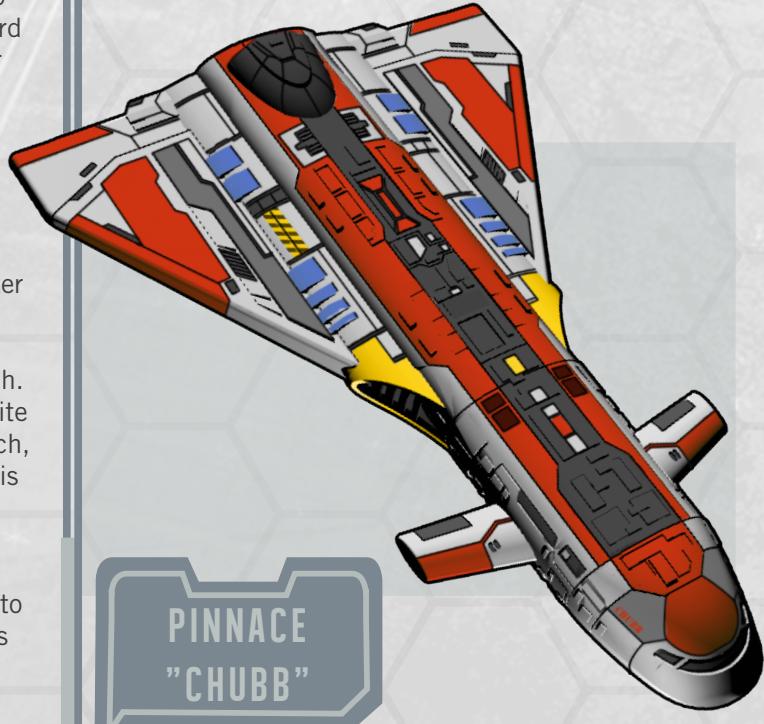
A pilot and a navigator capable of plotting a jump course are also necessary. Often this is a single individual, with a backup pilot carried so that the cutter and the lab ship can operate independently. However, many lab ships do not do this, as the vessel tends to function more as a mobile base than a starship as such. It will often be 'parked' in orbit above an interesting site or as a convenient location to conduct onboard research, after which all mobility is by way of the cutter until it is time for the lab ship to jump to its next destination.

The medic slot is not completely necessary, though in many cases a ship that carries passengers is required to have a designated medic, and common sense suggests that having one aboard is a good idea. Often this function is fulfilled by the backup pilot or another crewmember, with a very basic first aid certification. One of the scientists aboard may be able to fulfil this function.

The number of crew – officially, four – is more important than their exact roles. A ship of this size requires at least this many people to operate on a long-term basis, though when the lab ship is 'parked' the burden on the crew is reduced. A lab ship can get by with a minimum of a pilot/navigator, a jump-qualified engineer and another technically skilled crewmember plus sufficient people helping out on a full-time or part-time basis to fill the other two crew slots.

Much of the work of running a ship of this sort is very mundane – monitoring readouts, making meals for the more skilled crew, keeping the ship clean and carrying out extremely routine maintenance. Some lab ships run with a skeleton crew and require the scientists aboard or their research assistants to fill in some of the crew slots. However, this does draw manpower away from the ship's main function and is not an ideal way to operate.

PG 190



INSIGHT III

(TYPE-L)

TL12

TONS

COST (MCr)

Hull	400 tons, Standard	-	20
Armour	Armour 0	-	-
M-Drive	Thrust 2	8	16
J-Drive	Jump-2	25	37.5
Power Plant	Fusion, Power 180	12	12
Fuel Tanks	4 weeks operation, J-2	82	-
Bridge		20	2
Computer	Computer 10	-	0.16
Sensors	Improved	3	4.3
Weapons			
Systems	Probe Drones x 15	3	1.5
	Docking Space (40 tons)	44	11
	Pinnace	-	8.732
	Laboratories	100	25
	Docking Space (4 tons)	5	1.25
	Sealed Air/Raft	-	0.271
	ATV (stored in Pinnace)	-	0.155
Staterooms	Standard x 20	80	10
Software	Jump/2	-	0.2
	Library	-	-
	Manoeuvre/0	-	-
Common Areas		15	1.5
Cargo		3	-

TOTAL: MCr 136.411

CREW

PILOT, ASTROGATOR,
ENGINEER, MEDIC

RUNNING COSTS

MAINTENANCE COST

Cr11367/month

PURCHASE COST

MCr136.39

POWER REQUIREMENTS

80

MANOEUVRE
DRIVE

80

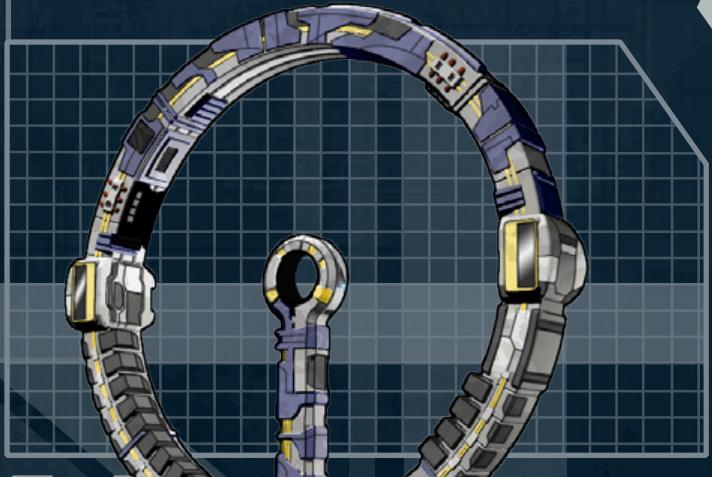
BASIC SHIP
SYSTEMS

80

JUMP DRIVE

4

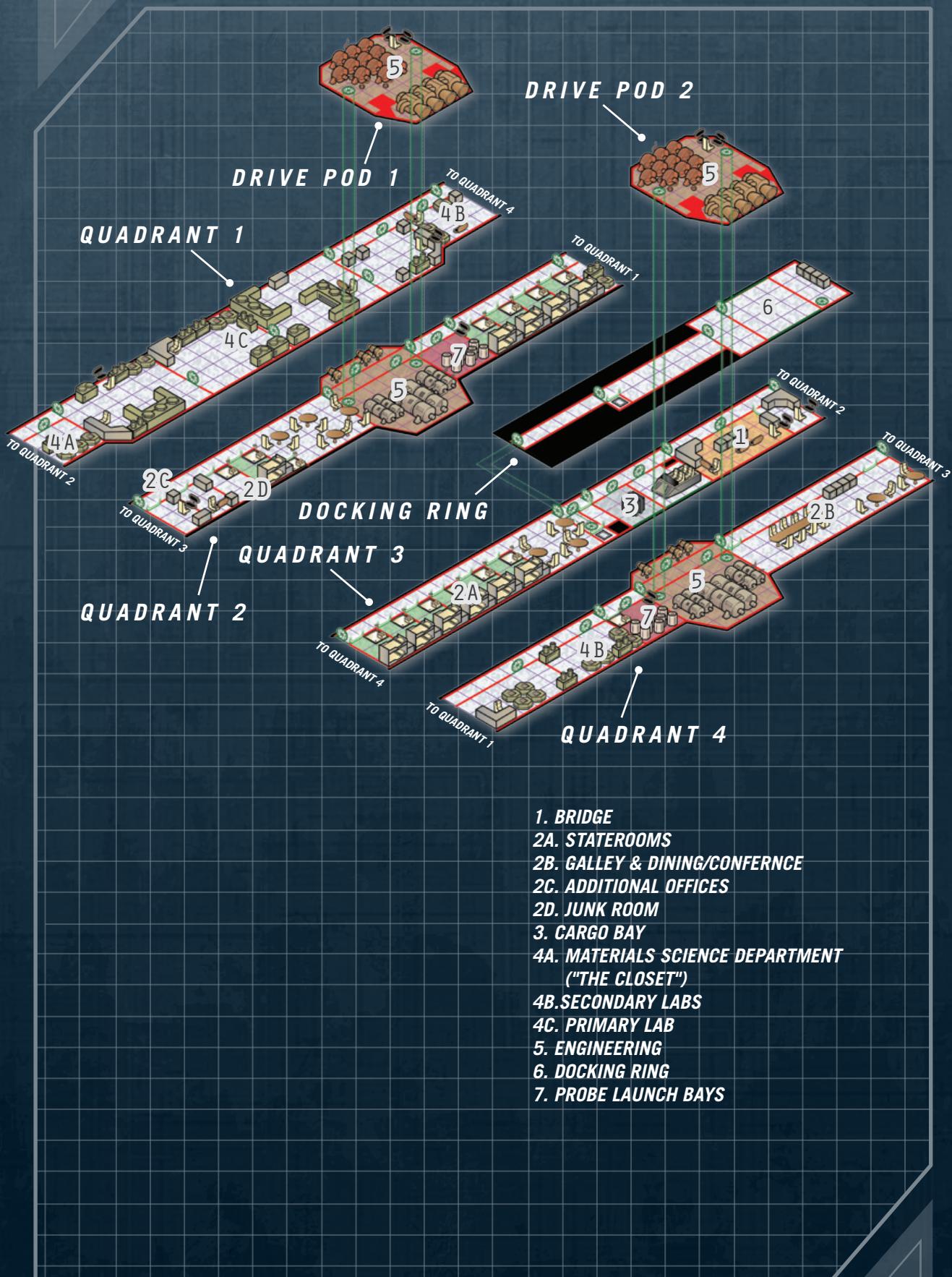
SENSORS



160

HULL POINTS

A highly specialised vessel, the laboratory ship is built to transport scientists and their equipment across the stars in order to conduct research, usually in remote locations. The ship itself is fitted with highly advanced sensors, while a pinnace can carry an ATV down to a planet's surface in order to conduct field expeditions. A special feature of this ship is that it is built so internal gravity can be created by spinning the hull. This is done to permit experiments to be carried out that might otherwise be affected by the gravitic plates installed as standard on all ships.



DECKPLAN KEY

Insight III is built on an annular hull form with a single main deck and two pods containing the ship's power plant, fuel, drives and control systems.

1. Bridge

The bridge is small and utilitarian, and is not optimised for high-tempo operations in a hazardous environment or a combat zone. Its workstations are set up to act as data processing units for the ship's sensors, which form part of its research equipment. Thus a member of the scientific crew can stand bridge watch whilst still working on his research.

Insight III is an ungainly ship which is not quick on the helm despite having 2G Thrust. This problem is exacerbated by old collision damage to the main hull which was repaired well enough to be safe but creates a slight imbalance when manoeuvring. Normally this is not much of a problem so long as the pilot is being slow and careful, but the referee may choose to impose a penalty (DM-1) on any violent manoeuvres carried out aboard this ship. Spinning the hull to simulate gravity is no longer advisable; the imbalance creates an unpleasant vibration that can make some crewmembers nauseous and cause the ship to wobble out of position.

2. Staterooms

As built, *Insight III* had twenty normal sized staterooms, but these have been modified over time. The six located in the same quadrant as the bridge are typically allocated to crew aboard most lab ships, but aboard *Insight III* three of them have been co-opted by members of the scientific team. The six in quadrant 4 of the original design have been removed entirely and replaced with a common area outfitted as a galley and dining/conference room with artworks in various styles around the walls. These are individually impressive but taken as a whole they clash rather badly with one another. Of the other eight staterooms on the main (ring) deck, two have been turned into offices and one is now essentially a large cupboard into which everything that does not have an 'official' place to be is dumped. This means that there are eleven functional staterooms available.

3. Cargo Bay

This space, capable of holding approximately 3 displacement tons of cargo, has been converted so many times that its walls are a mess of welded attachment points, stubs of partitions and equipment brackets. At some point this space was converted back to cargo stowage and currently contains a bewildering array of stores, spares and supplies arranged more or less at random.

4. Laboratories

The standard Type-L laboratory ship carries 100 displacement tons of laboratory space which can be configured in various ways. Aboard *Insight III* the configuration is fairly standard – a main lab flanked by two smaller ones and an auxiliary laboratory space not much larger than a standard cabin. The latter is known as 'the closet' aboard *Insight III* and is currently configured as a workshop with metalworking, electronics and even some woodworking tools. A plaque on the door grandly declares that this is the 'Materials Science Department' – there is probably a university somewhere missing a sign just like this one.

The two secondary labs are set up for medical/biological/biochemistry research and chemistry/metallurgy/physics respectively. They are fairly orderly and are well-equipped, though some of the instruments have clearly been retrofitted and do not sit properly in their allocated spaces.

The primary lab is a general/configurable laboratory space, parts of which have been reconfigured for all manner of experiments. It is a confusing place, with a workstation piled high with paper books on sociology and psychology sitting next to an ongoing project to analyse seaweed. The term 'utter chaos' does not begin to describe this part of the ship; this is in part a symptom and in part a cause of the bickering among the scientists.

5. Engineering

The engineering deck is crowded with powerplant, jump and manoeuvre drive components and their associated workstations. It is clearly a well-used space, with tool dings and obvious signs of a refitted drive system that did not originate aboard this vessel. For all that, the place is neat and tidy, with tools carefully placed in their racks and spares properly stowed. In short, the engineering spaces look like the spaceworthiness inspectors just came round.

6. Docking Ring

The docking ring is reached by climbing an access shaft from the air lock. In contrast to the engineering spaces, the docking ring is a shambles. Vacc suits and other equipment are strewn about the floor, with open storage boxes everywhere. Many of them contain a completely random assortment of objects which have apparently been sorted using a grenade. This area is the reception point for anyone coming aboard *Insight III*. First impressions thus tend to be of a chaotic riot of... stuff.

7. Probe Launch Bays

These two bays contain the stowage and launch apparatus for the vessel's complement of probes. Most are multi-purpose devices capable of collecting a wide range of data but there are a couple of oddly specialised probes at the back of the rack. One is a deep-ocean data collector, designed to launch a data pod back to the surface just as it reaches crush depth, and the other seems to be a military electronic warfare probe repurposed to collect multichannel radio-frequency emissions in a harsh environment such as a high-radiation area.

The Ship's Locker

The 'ship's locker' aboard the Type-L laboratory ship is in fact a set of stowage areas on each deck. The main-deck locker contains maintenance spares for the ship's minor electronic systems, emergency vacc suits and 'the armoury box', a locked container holding a set of personal small arms that someone bought and stuck in the locker years ago. It has probably never been opened, but contains four autopistols, two shotguns, two carbines and four blades, complete with webbing and belts, plus a modest amount of ammunition. These are not the personal weapons of any crewmember, and have quite likely been forgotten about by most of the crew.

The accommodation deck locker contains mostly luxury foodstuffs and a truly incredible quantity of porridge oats; engineering locker contains engineering spares. The docking ring locker contains vacc suits and other space-related equipment, some of which is still in its wrappers. Much of what was in the locker is now strewn about the floor, however.

Chubb

The ship's research pinnace is known (for some reason) as *Chubb*. *Chubb* is not the first pinnace to be assigned to this ship – records show that two previous pinnaces were retired as unspaceworthy; one was crashed and written off, and one is rather oddly listed as 'almost certainly on loan'. *Chubb* is a fairly new pinnace – barely fifteen years old – and is in good working order.

The pinnace is the only means to get quickly from the ship to a planetary surface and also serves to haul fuel, passengers and equipment back and forth. Judging from the wear and distortion on the docking ring, *Chubb* has been mildly pranged a couple of times but seems none the worse for wear.

VEHICLES AND EQUIPMENT

The docking ring contains an old but entirely serviceable 6-seater air/raft of the sealed-cabin type. This vehicle can be used to travel between the ship in orbit and a planetary surface, but cannot function in open space. Flying down to a planet is a lengthy business and coming back up takes several hours. For this reason the air/raft is rarely used unless it can be delivered to the planetary surface by the pinnace. This is a difficult task as it requires squeezing the air/raft into a narrow cargo area, and little else can be carried.

For this reason the scientists prefer to use the pinnace itself for planetside mobility. They do have four electrically-powered trail bikes on the docking ring, which are a lot easier to load aboard the pinnace. The bikes do not need air for their engines, but it is very awkward to try to ride one in a vacc suit.

Insight III carries enough camping and mountaineering equipment for everyone aboard, if it can all be rounded up from wherever it was scattered the last time it was used. Some of the crew have a bad habit of breaking out part of the ship's kit and then not putting it back with the rest – and doing it again when they need the same gear because they cannot remember where the first lot was dumped. As a result much of the rarely-used equipment such as cold-weather survival kits are scattered all over the ship. On the plus side this does mean that raking around in any stowage area will likely turn up common items such as filter masks, ration packs and flashlights, but assembling a full kit of any given type of equipment is an exercise in frustration.



THE SCIENTISTS AND CREW

The *Insight III* is jointly owned, which may be the only reason its personnel complement are still together. None of them is willing to give up their share of the ship and nobody has the cash to buy any of the others out. Although the owners have different sized stakes in the vessel, the amount of influence they exert over its activities is not necessarily proportionate to their holdings. Likewise, the relationships between the people aboard have changed and evolved over time, and will continue to do so unless some event causes the group to finally fragment.

The scientists are not idiots, though they sometimes behave that way. The need to prove one another wrong can sometimes cause a lapse in common sense or cause a trivial situation to be taken to a ridiculous extreme. Some of the equipment bought or built aboard the ship was obtained specifically for one fairly minor and irrelevant task, just to settle an argument or prove a point. Most of the time the scientists remember they are operating in a hazardous region, but their petty differences and the occasional serious piece of important science can at times be too much of a distraction.

The scientists live and work aboard their ship, or sometimes planetside on a temporary basis. They all have necessary tools of their trade such as personal computers, field kits and the like as well as clothing suitable for shipboard and planetside work as well as dress and leisure outfits. They have all collected a variety of personal items which are (mostly) left in their cabins.

In addition, the ship's stores contain most items that would be needed by a crewmember or scientist such as vacc suits, cold weather clothing and the like. It might take some searching to find a little-used item, but the referee need not keep track of how many flashlights or data pads a scientist has – if a common item is needed, then rooting around the ship will turn it up sooner or later. Of course, it might be something that someone else was using a while back, causing another round of disputes about who disturbed whose work... but such is life aboard *Insight III*.

Only weapons and special items are listed under each character, for the reasons given above.



The Scientists at a Glance

The following quick reference guide can be used as an aide-memoire by the referee.

Dr Maria Corswaine (46), Biomedical Sciences

Argumentative, convinced that everything comes down to biological processes and imperatives. Twice married to and divorced from Ronaldo, currently also in dispute with Alphred.

Dr Ronaldo Corswaine-Tyler (52), Social and Political Sciences

Sometimes reckless, usually lucky, always untidy. Incredible memory. Infuriated with Maria for moving things from where he knows he left them. Very fond of paper – books, flimsies and the like – rather than working from a screen.

Professor Alphred Banks (Oelkfadzo Rangtza) (39), Space and Planetary Sciences

Vagr, former close friend of Maria but currently not on good terms. Celebrity scientist rather than a great thinker and determined to 'prove' that he is a genius.

Henderson Varnix (31), Engineering and Physical Sciences

Practical physical scientist, more down to earth than the others and less likely to become side-tracked from important issues by something more interesting. Good friends with Alphred. Paranoid (and rightly so) about the number of influential groups he has offended.

Price (40), Ship's Engineer

Former naval petty officer, very orderly and neat, likes to cook.

Lynne Morgan (28), Research Assistant

Pilot and owner of the pinnace *Chubb*, practical, swears a lot. Comes over as distant and rather coarse at first; slow to trust newcomers. Jealous of her privacy and resentful of poor treatment of her pinnace.



Dr Maria Corswaine

Scholar (physician)

SPECIES		GENDER	AGE
Human		Female	46
TRAITS		-	
STR	5	INT	11
DEX	9	EDU	11
END	8	SOC	8
SKILLS			
Admin 0, Art 0, Drive 0,			
Electronics (computers) 2,			
Investigate 1, Language (Gvegh) 1,			
Language (Trok) 1, Medic 3,			
Persuade 0, Science (biology) 4,			
Science (chemistry) 1,			
Science (genetics) 3			
EQUIPMENT		Revolver (Damage 3D-3)	

Maria Corswaine is the ship's biomedical scientist, and also fulfils the role of medic when necessary. She has been married to Ronaldo twice and divorced from him three times – the result of a technicality on a hastily-obtained divorce the second time around. Most of the time she thinks she hates Ronaldo's guts, though there are still occasional sparks of attraction between them.

Maria speaks the varg language of Gvegh, though these days she uses it mostly to cuss at Alphred. The two were close friends at one point but at present it is difficult to say whether Maria is more likely to lose her temper at Alphred or Ronaldo. Whilst not the most orderly person in the world, Maria is driven to the brink of insanity by Ronaldo's incredibly untidy habits, often venting her frustration by kicking whatever he has left lying around into corners. This does not help much and has resulted in various breakages.

Maria is a biomedical science expert, tackling most problems from the point of view of life processes. Questions about a human society tend to be



considered in the context of food supply and similar biological functions, leading to arguments with Alphred whose theories are – according to Maria at least – little more than nonsense. Everything can be explained in terms of food, reproduction and protection; Alphred's theories about energy and geophysical factors are overcomplex and designed mainly to make him look clever... so she tells him on a regular basis.

Maria owns the largest percentage of the ship held by any of the crew. Many of the vessel's commissions come in by way of her old research supervisor at the University of Tobia, and much of the independent work done aboard the ship is published by that route as well.

Weapons

Maria has a small revolver (3D-3 damage) of the 'purse gun' type which she usually carries when appropriate. It is loaded but she does not carry spare ammunition. The gun was given to her by her (then) husband Ronaldo and she carries it more because he wants her to than because she thinks it might be needed. Although they are estranged, the gun is a reminder that he does actually still care what happens to her, and she is oddly fond of it. Maria would be very reluctant to actually use the weapon, however.

M. Corswaine

Dr Ronaldo Corswaine (Tyler) Scholar (scientist)

SPECIES	GENDER	AGE
Human	Male	52
TRAITS		-
STR	INT	SKILLS
6	8	Admin 0, Advocate 2, Carouse 0,
DEX 6	EDU 15	Diplomat 1, Drive (wheeled) 1,
END 9	SOC 9	Electronics (computers) 2, Engineer 0, Flyer 0, Investigate 2, Jack-of-all-Trades 1, Profession (hydroponics) 1, Science (archaeology) 1, Science (economics) 1, Science (history) 3, Science (sophontology) 2, Stealth 1
EQUIPMENT		-

Ronaldo is, for the most part, unusually lucky. Coming from a good family he benefited from being just the right age to coast into the university programme on a mass scholarship, and to be selected for the showcase group that were tracked by a reality vid series as they passed through the system. His deliberately obscure thesis subject suddenly received front-page status due to a throwaway line in a movie that was popular at the time, and so it went on throughout Ronaldo's career.

He is not as sharp a thinker as his ex-wife Maria, but he is a voracious reader with an excellent memory who can put together odd facts from data he skimmed three decades ago to come up with a workable hypothesis. Some of his conclusions have been low-percentage and a bit wild, yet more often than not he is right no matter how offbeat his idea might be. Unfortunately, he also remembers everything everyone around him ever did and said, and throws the worst bits back at them in any argument.

Ronaldo can remember which corner he left a given object in six months ago, and sees no problem with leaving stuff lying about all over the place. He is also

prone to picking up a project and then putting it down again unfinished, often with several different pieces of research ongoing at a time. He then gets annoyed when someone tidies up his books or gets rid of the epic pile of printout flimsies he left on the lab floor for a fortnight.

Ronaldo used to have one of the cabins in the main accommodation block aft of the bridge, but has recently moved to the most distant of the cabins on the main corridor in a pointed gesture that was supposed to have some effect on Maria. Her only response so far has been to start using Ronaldo's former cabin as the dumping ground for everything aboard the vessel that does not have a place of its own – which typically means picking up whatever Ronaldo has left lying around and throwing it into his cabin before quickly closing the door on a potential avalanche.

Ronaldo owns only a small percentage of the ship. He did have a larger share but part of it was redistributed to make recompense to the other owners after a reckless decision led to damage to the vessel and the loss of one of its pinnacles. This resulted in *Chubb* being obtained, along with its owner-operator Lynne. It also caused an important client to be alienated, which was one of the factors ultimately leading to the lab ship having to relocate to Sindal subsector.



R. Corswaine

Prof. Alphred Banks (Oelkfadzo Rangtza)

Scholar (field researcher)

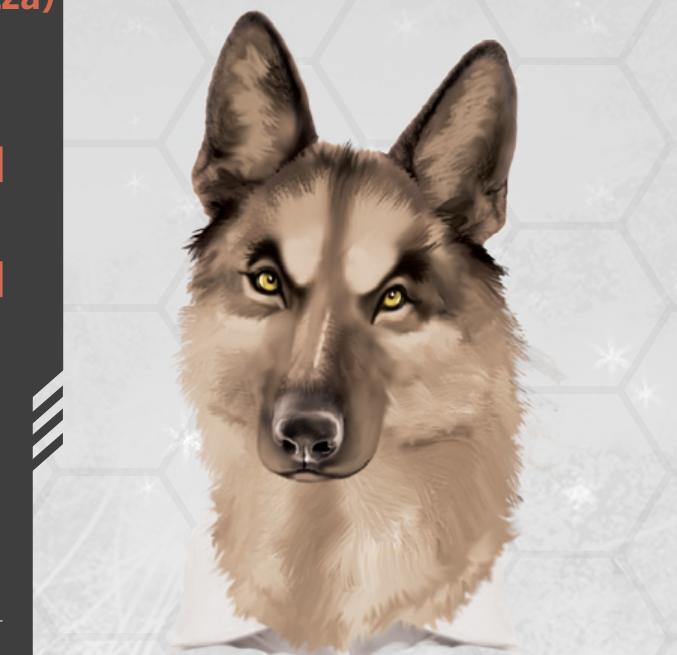
Entertainer (artist)

SPECIES		GENDER		AGE
Vargr		Male		39
TRAITS		Bite (1D+1), Heightened Senses		
STR	6	INT	10	SKILLS
DEX	6	EDU	9	Art (write) 1, Astrogation 1, Carouse 1, Deception 1, Drive 0, Electronics (computers) 1, Engineering (J-drive) 1, Investigate 0, Language (Gvegh) 2, Navigation 1, Persuade 1, Science (astronomy) 1, Science (cosmology) 3, Science (planetology) 1, Streetwise 0, Survival 0, Vacc Suit 0
END	5	SOC	10	
EQUIPMENT		-		

Like many vargr living within the Imperium, Oelkfadzo Rangtza adopted a human-sounding ‘use name’ to avoid endlessly telling people how to pronounce his actual name. He chose ‘Alphred Banks’ and this is his legal identity for all purposes. What is less legitimate is his use of the title ‘professor’.

Alphred began his career as a practical scientist working in the space and physical sciences field, and had a modestly successful career culminating in his team winning the Anderson Prize for their work on jumpspace dynamics. At this point Alphred more or less ceased to be a scientist at all, and instead focused on a career revolving around attending functions, parties and presentations. He became the go-to guy for vid shows whenever space science stories came up, and spent several years as a ‘celebrity scientist’ during which he was routinely introduced as Professor Alphred Banks. This pleased him and he adopted the title.

All of this was made possible by Alphred’s publication of *One Week, More or Less: Jumpspace for the Working Sophont*. This is a fairly basic but entertaining and readable account of the physics surrounding the use of the jump drive and its



various effects. The book actually has very little science content, and what there is tends to be very basic. To be fair, it has to be for the average person to comprehend it. Most of the content is anecdotes with ‘scientific-ish’ explanations of events experienced by a fictitious space voyager who bears a strange resemblance to the author.

One Week, More or Less sold very well and established Alphred in the popular imagination as a great genius whereas in fact he is no more than a charismatic university graduate. His work is derided by ‘real’ scientists, though many will admit that it is a useful rule-of-thumb introduction to the subject. He came to be aboard *Insight III* by way of a convoluted series of events which he will happily relate parts of before veering off into aimless anecdotes or obvious fabrication.

Alphred styles himself ‘head of space sciences’ aboard the vessel, which is fair enough since he is the only specialist in that field aboard. He used to be a close friend of Maria but recently they have been arguing a lot. This is because Alphred’s share in the ship has allowed him to push for contracts that Maria did not want, and her own work has suffered accordingly. Alphred is a native Galanglic speaker like all the other crewmembers, but occasionally lapses into Gvegh for dramatic effect. The small lab is his personal domain, and he resents anyone else using ‘his’ equipment or disturbing his experiments.

Prof. Alphred Banks

Henderson Varnix

Scholar (field researcher)

SPECIES		GENDER	AGE
Human		Male	31
TRAITS		-	
STR	5	INT	7
DEX	7	EDU	9
END	8	SOC	5
SKILLS			
Athletics 0, Drive 0, Electronics 0, Gun Combat (Energy) 1, Investigate 1, Mechanic 2, Medic 0, Navigation 0, Pilot (spacecraft) 1, Recon 1, Science (physics) 3, Survival 0, Vacc Suit 0			
EQUIPMENT	Laser Pistol TL11 (Damage 3D+3)		

Henderson is not, at least according to Alphred, a 'proper scientist'. He worked for several years as part of a research team but was always given a supporting role due to his lack of an advanced degree. 'Glorified research assistant' is one of the things Alphred calls Henderson, though this is rather unfair. Certainly his career was less than eminent, but he is a competent professional with a good working knowledge of his field.

Henderson is also 'not quite on the run' from no less than four influential groups he has offended. These include former members of his research team, a corporate client that suffered significant financial losses as a result of incorrectly (according to Henderson at least) using his team's data and an ex-wife who seems determined to destroy what remains of his career.



Henderson owns just 1.5% of the lab ship, but makes himself useful in a variety of ways. He is by far the most prudent and sensible of the scientists, and despite Alphred's constant derision they are actually good friends. Henderson returns Alphred's snarky comments in kind, calling him a vid-show scientist and a fraud, but actually the two respect one another and often team up as the 'hard sciences department' in which Alphred gives all the orders and Henderson constantly defies him. They do not allow their game to get in the way of doing good work... usually.

Weapons

Henderson owns a TL11 laser pistol (3D+3 damage) which he wears on a belt festooned with various tools and instruments when in the field. The weapon is large, highly decorated and a bit ostentatious, but that is the point. Henderson believes that being obviously armed is a good way to not encounter violence, and thus far it seems to be working. He has discovered that by dialling the power on his weapon right down he can engage in shipboard target practice, which has led to a couple of unfortunate incidents. The most recent involved a pile of flammable data flimsies and the most prolonged shouting match aboard *Insight III* to date.

H. Varnix

Price

Navy (engineer)

Merchant (free trader)

SPECIES		GENDER		AGE
Human		Male		40
TRAITS				-
STR	10	INT	9	SKILLS
DEX	5	EDU	9	Animals 0, Carouse 0, Drive 0, Electronics (comms) 1, Engineer (M-drive) 3, Flyer 0, Gunner 0, Mechanic 2, Persuade 1, Seafarer 0, Steward 1, Streetwise 1, Vacc Suit 1
END	11	SOC	6	
EQUIPMENT		"Coach Gun" Shotgun (Damage 4D)		

Nobody is quite sure whether Price's name is his first, last or middle name, or just a nickname. In fact it is his only name – he comes from a society where people have a 'friend-name' for social use and an alphanumeric code keyed to their DNA for legal identification. This sounds horrific to most outsiders, but in reality it is no worse than anywhere else. However, Price has long wearied of explaining all this and just goes by 'Price' without any explanation.

Price does not own a part of the ship but did inject a large amount of cash into the working funds when he came aboard. This came from a brilliantly successful high-risk trade run aboard his last ship, after which he wisely got out before the captain took one chance too many.

Price's career path up to joining *Insight III* was not unusual. He served in the Imperial Navy as a petty officer in the engineering department and then joined a series of small trading ships as engineer and general crewmember. He mostly functions as the ship's engineer, and insists that the engineering spaces remain 'science free' by which he means



he will not tolerate the clutter present elsewhere in the ship. Price also has experience as an assistant steward, and is a surprisingly good cook.

Price finds the antics of the scientists somewhat irritating but so long as they leave his engineering room alone he is content to let them get on with being idiots. He does occasionally attempt to restore order in the rest of the ship, tidying up objects and carefully boxing them. The labels he attaches to these boxes are inevitably known as 'Price tags' aboard the ship, and seldom remain accurate for long. Price is often heard grumbling that someone has 'done a science' on his orderly cargo area. For the most part, however, he is content in his role and quite enjoys watching the show when the scientists start butting egos.

Weapons

Price keeps a double-barrelled 'coach gun' on a bracket in engineering. This is basically a short-barrelled sporting shotgun which is handy enough to be useful in a confined space. He has no real skill with it and has only fired a gun once in his life, but the weapon is there along with rescue tools and other emergency equipment, just in case it is needed. There is a box of shells in an equipment locker somewhere. Price knows exactly where it is like everything else in engineering, but someone else would be hard put to find it.

Price

Lynne Morgan

Drifter (scavenger)

SPECIES		GENDER	AGE
Human		Female	28
TRAITS		-	
STR	6	INT	8
DEX	6	EDU	9
END	9	SOC	14
SKILLS			
Athletics (dexterity)	1		
Electronics (sensors)	1		
Gun Combat (slug)	1		
Pilot (small craft)	1		
Recon	1		
Survival	1		
Vacc Suit	1		
Admin	0		
Flyer	0		
Heavy Weapons	0		
Language (Trokh)	1		
Melee	0		
Profession (belter)	1		
Stealth	0		
EQUIPMENT			
Snub Pistol (Damage 3D-3)			
Gauss Pistol (Damage 3D)			
Rapier (Damage 2D)			

Lynne Morgan comes over as a fairly nondescript working-spacer sort of individual, using belter/salvager slang and swearing a lot. She prefers it when this is all people see, at least until she has had time to judge them. In fact, she comes from an extremely rich and influential family, and is an honours graduate of her homeworld's military academy. Technically holding the rank of Reserve Second Lieutenant, Lynne should have embarked upon a prestigious career in the military.

Her chosen arm was infantry; perhaps an unusual choice for a small and slight woman from a well-connected background, but she is a practical sort of person who prefers to get things done rather than support others doing it. Her career never began, however. There was an incident which she does not discuss, and although she saw out the course and graduated at the head of her class, she declined the offer of a commission and left her homeworld, eventually gaining employment aboard a salvage vessel.

Lynne does not have a share in the ship, but she does own the pinnace *Chubb* which is essential to the vessel's operations. As well as piloting the pinnace she helps out aboard the lab ship in a general research-assistant capacity (which usually



translates as being the one who quietly solves the problem whilst everyone else is shouting at one another) and provides an armed presence where one is needed.

Lynne is not happy as such aboard *Insight III* but is content that it is a place where she can make a life away from the politics and social treachery of high society on her homeworld. At some point, she knows, she will move on and perhaps even return home but for now this is as good a place to be as any, and she is quite fond of the scientists. Their disputes are so small, petty and often esoteric that they are amusing more than anything else, though Lynne does worry that some of the crew can be reckless and might get hurt in a dangerous environment such as Sindal subsector.

Weapons

Lynne has an army officer's issue gauss pistol (3D damage) in a drawer in her cabin, along with a collection of army memorabilia which might seem out of place to anyone who does not know her background. She does not carry her service pistol in the field, but instead has a very ordinary snub pistol (3D-3 damage) which is more in keeping with her image.

Likewise, in the back of her closet is her academy dress sword, equivalent to a rapier (2D damage). Again, she does not carry this weapon and would have to explain why she had it if other crewmembers saw it. It is sharp and functional, and would be deadly in an emergency.

L. Morgan

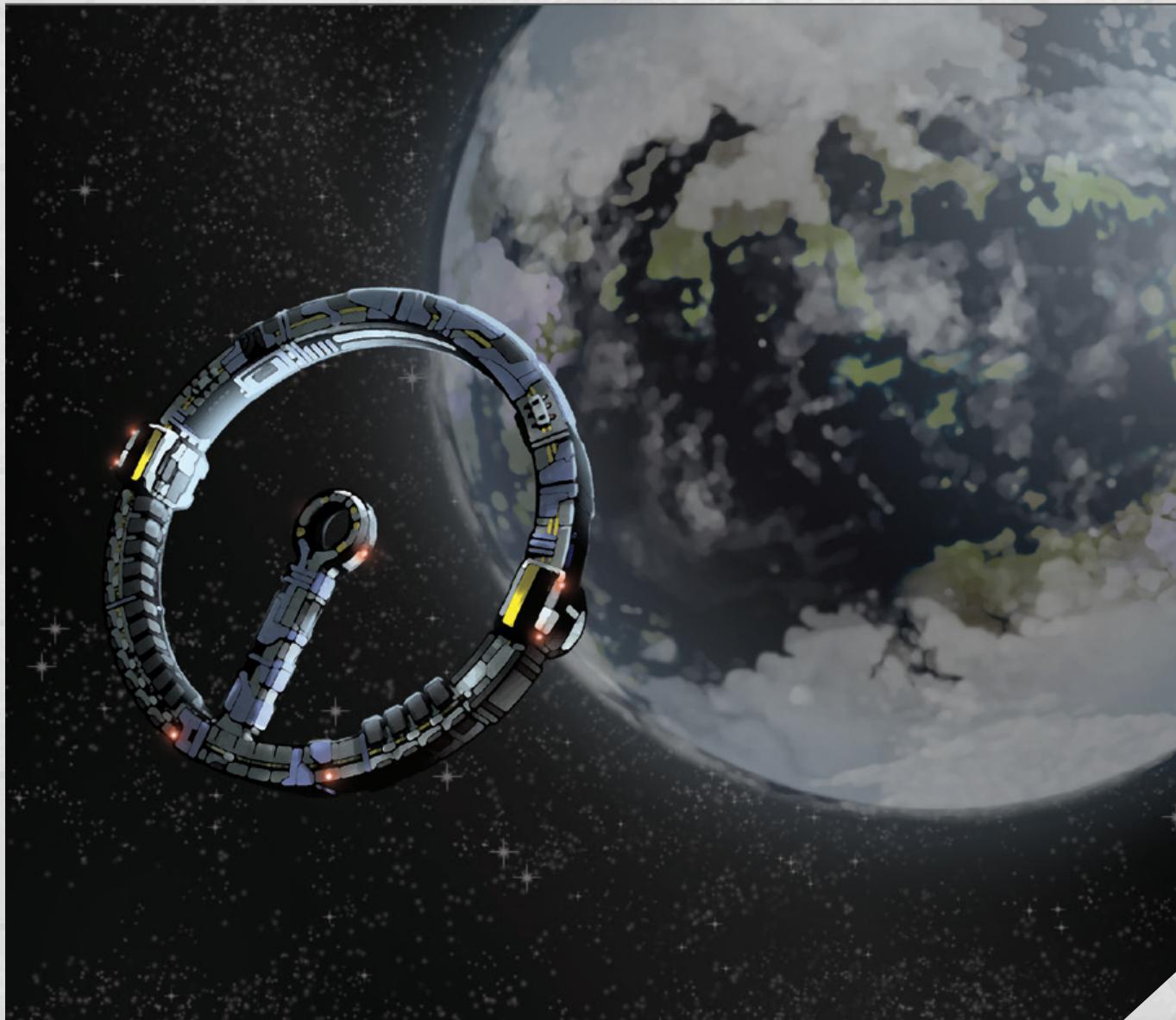
CREWING THE LAB SHIP

The lab ship needs a crew of five to operate effectively. These personnel must be able to pilot the pinnace and the main ship, operate the drives and power systems, and support themselves with general maintenance, medical and steward tasks as needed. The owners and crew can manage this between them, but only at the price of pulling scientists from their main functions.

Lynne can handle all pinnace operations herself, and is quite capable of basic starship bridge functions. However, a properly qualified starship pilot is desirable along with an astrogator. The scientists can cover these operations but would prefer not to. Additional bridge personnel including sensors and communications operators would also be useful.

Most engineering tasks can be covered by Price with assistance from others with skills such as electronics and mechanics. However, at least one additional qualified engineer is desirable.

Other personnel can handle routine work assisting the scientists or maintaining the ship – there is a backlog of minor jobs that need attending to sooner or later – and supporting the crew by acting as stewards, cargo handlers and the like. This is not glamourous work but it is necessary to the smooth operation of the ship. Travellers with planetside skills may be useful when the ship is engaged in a mission, and can generally help out when aboard – they will be expected to, even if they have no specifically necessary skills.



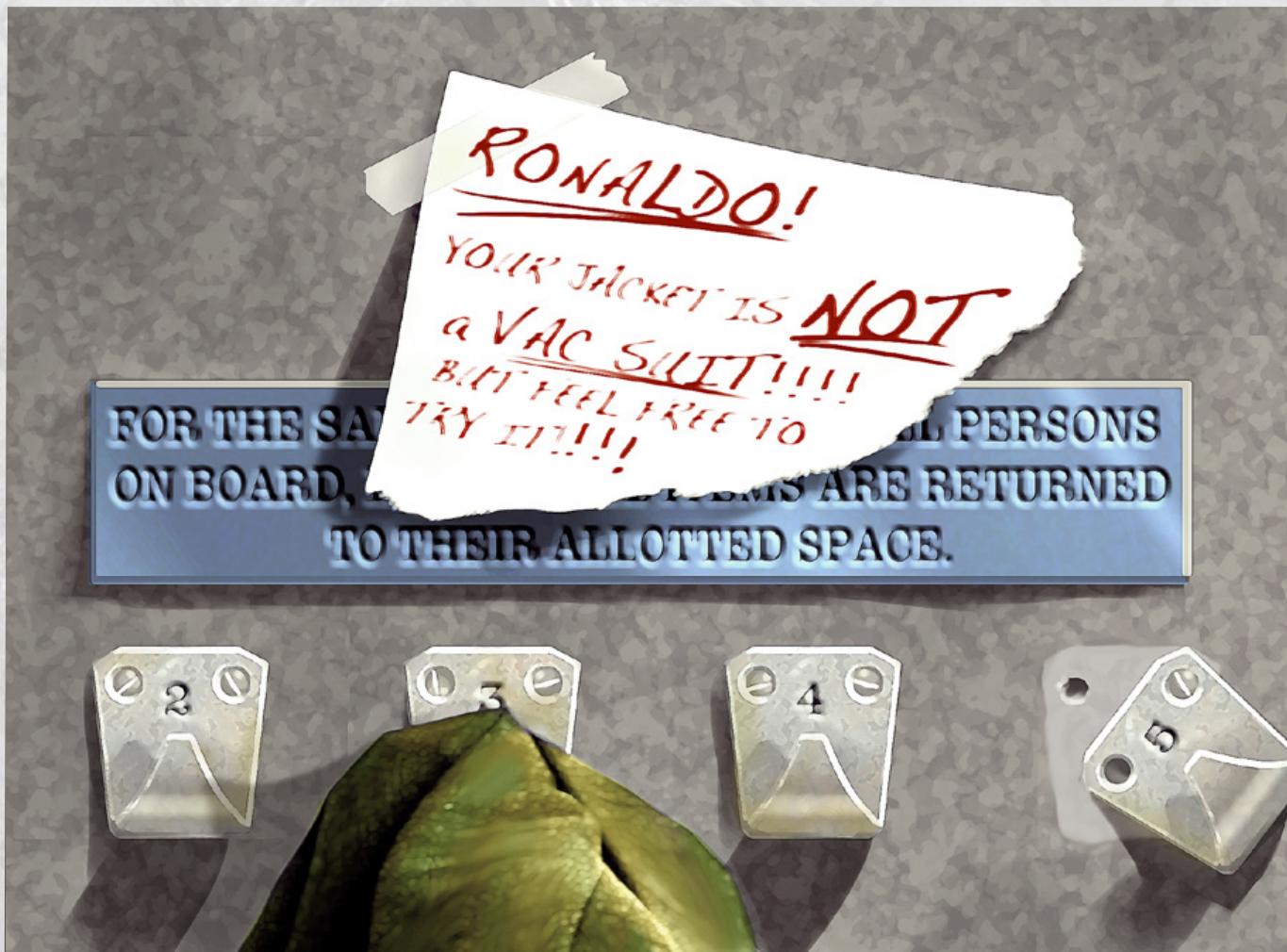
THEORIES OF EVERYTHING

Theories of Everything can be treated as an episodic adventure, with incidents taking place at each world the ship visits. However, there is more to the story than this. Whilst the incidents themselves are important of course, it is the interplay between the characters that will make the adventure memorable. The referee should try to avoid turning the scientists into caricatures whilst still maintaining a faintly bizarre atmosphere aboard the flying ivory tower that is *Insight III*.

Remember that these people are not fools, but their perceptions have been warped by their environment. They are used to living in a world where the main threats they face are to their professional credibility. They can fail to see more mundane hazards that would be obvious to anyone with a little more common sense, and once they realise they are in trouble at least some

of the scientists will feel completely out of their depth. In short, the scientists' actions should make sense from their own point of view even if they seem rather strange to outsiders.

Other than a few critical situations, this adventure does not attempt to tell the referee what skill checks, at what level of difficulty, are necessary for every possible situation or encounter. Instead, the adventure presents a situation and guidelines on how it is likely to unfold. The referee will then adjudicate the Travellers' actions as they go. Thus there is no railroaded script for how the storyline unfolds or how problems must be solved. The Travellers and their clients are free to find whatever solutions they can come up with – which in many cases will be nothing like an adventure writer would have predicted!



HIRING ON

At Marduk starport (the highport or downport, it really does not matter) the Travellers are sought out by Alphred, who has appointed himself spokesman for the ship. Alphred is well-dressed and well-spoken, clearly a man (actually vargr, but same thing really) of education. The Travellers might recognise him or may even have read his book. He offers to buy lunch if the Travellers will listen to his proposal.

The proposal is as outlined in the Introduction, depending on whether the Travellers have a ship or not. Essentially, they will join the crew of *Insight III* for a few weeks, helping out on a scientific voyage around the local worlds. They will receive board and lodging, a small per-diem allowance for minor expenses, and at the end of the trip they will either receive a payment or the scientists will pay for the parts they need for their own ship, and for passage back to Marduk. They will also take care of dock fees (but not repairs) while the Travellers' ship is in port.

Alphred is a personable and friendly individual who is accustomed to answering penetrating questions without giving away anything he does not wish to. This would make it hard for the Travellers to find anything wrong with his story even if there was – but there is not. The job is as advertised, and the scientists are genuine in their intentions. Alphred even offers to have the ‘ship’s lawyer’ (Ronaldo) draw up a suitable contract – which will be found to be completely fair and above board if examined by a legal professional.

The only truths that Alphred is economical with are the dysfunctional nature of the ship’s crew and the fact that he allows the Travellers to believe whatever they infer from his offer. They might get the idea that the ship actually has a professional lawyer aboard, for example, only to find that he is in fact one of the scientists with some small legal experience. Nevertheless, there are no lies and the deal is an honest one – but Alphred knows the nature of shipboard society on *Insight III* would drive off many potential clients and tries to ensure it does not become obvious too soon.

For this reason, when the Travellers come aboard the scientists will be on their best behaviour and will try to get along or at least disagree out of earshot. This will create a rather stilted and formal atmosphere which eventually gives way to the more common disagreements and loud arguments. The first one of those might alarm the Travellers, but they will soon see it is normal.

COMING ABOARD

Insight III is parked in a holding orbit close to Marduk Highport. This is common with ships that cannot land in a docking bay, and in the case of this vessel is standard operating procedure. Almost all transfers of personnel, fuel and equipment are done by the ship’s own pinnace or small craft from the highport. Refuelling, for example, is normally undertaken by bringing a fuel shuttle from the highport alongside the lab ship rather than manoeuvring it close to the port and docking the ungainly ship to a fuelling station – though that can be done.

Transit to the lab ship will be aboard the vessel’s pinnace, *Chubb*, piloted by Lynne. She has little to say to the newcomers other than a clipped and professional-but-standoffish pre-flight announcement and an indication when docking with the lab ship is about to take place. Lynne will not allow newcomers to ride in the cockpit, but Alphred will be in the passenger compartment with them to answer questions.

First impressions of the pinnace are fairly standard – it is not brand new and clearly a working vessel, but does not show signs of hard use or field repairs. Equipment such as emergency vacc suits and tools are in place, and unless the Travellers are extremely bad-mannered or destructive Alphred will be pleased rather than concerned if they insist on checking these items themselves. He would prefer his newly-hired crew to be thorough in investigating the equipment everyone’s lives may depend upon.

There is nothing out of order aboard *Chubb*, and the short flight to the lab ship is handled professionally. Travellers may be able to see the odd ship coming and going from the highport – Marduk does not receive huge volumes of traffic, but small merchant ships are not uncommon. Soon they are docked aboard *Insight III* and come aboard into the riotous mess that is the docking ring. First impressions here might be of Maria or Henderson making a hurried and futile attempt to tidy up. Price will not do so – he keeps his engineering spaces orderly and long ago gave up on any attempt to do the same elsewhere.

Formal introductions are supposed to take place on the converted accommodation deck, where the scientists have set out a sort of ‘cheese, wine and assorted other stuff’ buffet for the newcomers. Henderson is detailed to show Travellers to the cabins they will be using, after which everyone will reconvene for nibbles and a chat.

The cheese and wine party is sedate but slightly oddball. Price wanders in and out with trays of things he’s cooked, and presses everyone for their comments on taste, texture and compatibility with other items on the menu. Lynne disappears as soon as possible, while the scientists try to get to know the newcomers without scaring them off.

Each acts according to his or her nature. Thus Maria and Ronaldo are mostly at other ends of the room or ignoring one another; astute observers will note that they are determinedly not making the snarky comments that have obviously come to mind. The tension between them is obvious, but equally it is apparent that they are making an effort to get along or at least not to argue in front of the newcomers.

Alphred works the room, making sure he spends time with everyone, and has something friendly to say to each of the newcomers. He makes sure everyone knows that the scientists are all eminent experts in their own fields and form an excellent cross-discipline team that has solved many problems for its clients and produced ground-breaking research from time to time. This is all true, but it is not the whole story of course!

Henderson plays host, making sure everyone has wine or whatever else they want to drink, and trying to get conversations going. Sooner or later the Travellers will want a tour of the ship, and he will probably be the one to guide it. Nothing is off limits, though he does advise due care and attention in the cargo and lab areas. He strongly recommends a ‘touch nothing’ rule in the labs.

The mission will need to be discussed at some point, and again there are no real secrets here. The vessel has been hired to carry out a series of experiments and investigations in the present area, including the following.

- Routine flight tests and crew orientation.
- Research into aquatic and maritime life on Marduk (cries of ‘oh good, more seaweed!’ might arise at mention of this).
- Collection of rock, soil and water samples on Marduk and follow-up analysis.
- Transit to Borite.
- Collection of rock, water and soil samples on Borite, plus investigation into trace minerals on the surface.
- Investigation of ruins located on Borite by previous expedition.
- Transit to Noricum.
- Routine calibration and verification of instrumentation at a mining station on one of the moons orbiting a gas giant in the Noricum system.
- Transit in-system to Noricum
- Collection of soil, water and air samples on Noricum.
- Exploration of a site of archaeological interest on Noricum
- Transit to Thebus.
- Mission concludes.

The mention of Noricum might pique some interest – the place is still hazardous after the war that destroyed its civilisation. Indeed, this is to a great extent what the mission is about. The scientists are tasked with figuring out how hazardous the place still is and how long it will take to return to habitability. This will require use of vacc suits and decontamination equipment but is not expected to be particularly dangerous if protocols are followed.

The scientists will be quite happy to discuss the mission and their work – some of them cannot be prevented from doing so – and are fairly open about most aspects of the ship and its mission. However, they are not prepared to explain every nuance of why some of them do not get along at a first meeting with strangers.

Eventually, the party will wind down. There are still some items to bring aboard – *Chubb* will need to make a couple more trips, and there will be the usual boxes and crates to stow once they are aboard – and the fuel shuttle from the port is due in a couple of hours to top off the tanks. The Travellers might decide to help out, or to get some sleep, or whatever they wish to do. Orientation and crew assignments will be done in a few hours when the wine is no longer a factor, after which the mission can get underway.

MARDUK

The first task facing the Travellers is to be assigned their roles aboard *Insight III*, followed by a short period of familiarisation with the ship and its systems. Everyone who is to perform technical tasks like astrogation or engineering will need passcodes for the ship's workstations. The pilot(s) will need to practice manoeuvring the vessel as well. A lab ship does not handle quite like any other vessel, and takes a little getting used to, especially one like *Insight III* which has suffered what some pilots call 'unscheduled field modifications' and subsequent repairs.

This is all fairly routine stuff and takes only a couple of hours, during which the vessel relocates to a different orbit. The first part of the mission is here on Marduk, and could be undertaken without moving the ship. However, repositioning allows better sensor coverage of the groundside region and also allows the scientists to observe the competence of their new crewmembers.

During the repositioning manoeuvre, *Insight III* receives a message from the starport warning that it is proceeding beyond the defended zone covered by the port's weapons. There is no current or expected threat from Oghman raiders, but caution is always advised. This is a routine warning which is always issued, but may alarm Travellers who are not expecting it (especially if they have been through *Reach Adventure 1: Marooned on Marduk*).

Once in position, the lab ship makes a sensor scan of the target area, which is a region of coast where the ruins of a city can be made out under the vegetation. The area has a slightly higher than usual background radiation count but otherwise seems fairly safe. Clear landing spots are a little difficult to find, though an area of beach between the city and the sea looks promising. The plan is to deposit the initial survey team there and shuttle down more equipment in a second flight.

There are several tasks to be carried out here, which will likely take a couple of days at a minimum. Maria wants samples of soil and vegetation – yes, including seaweed – from all around the area, whilst Ronaldo and Henderson wish to explore the ruined city and hope to map it as well as finding any artefacts they can pick up. Alphred has less to do but is determined to be seen doing important work, and demands sensor time for various (and largely frivolous) experiments.

DOWN BY THE SEASIDE

The pinnace drops off whatever equipment the scientists think they will need – tents, instruments, dirt bikes, crates of beer or whatever – and all of it has to be sorted and organised into some kind of 'base camp' for a couple of days' exploration and analysis. Maria is chafing to get some samples as soon as her field lab is set up, and quickly begins demanding anyone nearby go back and get more samples from somewhere near wherever this particular interesting one came from. She is pretty short-tempered with anyone who cannot recall where a given piece of seaweed, soil sample or phial of muddy water came from, and demands to know what elementary school's biolab they trained at. This is all just a little unfair, since the Travellers may not actually be trained scientists or assistants, and they are trying to do several jobs at once. Not that Maria cares about that....

There are several sites of interest along the beach and in the fringes of the ruins; typically places where local conditions are unusual. There are distinct patches of vegetation with slightly different colourings and characteristics, and Maria wants samples of everything. Properly labelled of course, but also right now. The result is likely to be Travellers rushing around on foot or the dirt bikes, collecting samples from up and down the beach or plunging into the sea to emerge with armfuls of curiously yellowish-orange seaweed.

Meanwhile, Alphred wants rock samples, cores from the ground and the seabed, mapping flights with the pinnace, and all manner of physical data. Astute observers may realise that whilst Maria's chaotic approach is due to excitement, she has spotted patterns to the different vegetation and is trying to throw together a working theory of how and why – whereas Alphred is taking a shotgun approach in the hope of finding something that will make him look useful. Maria's research might actually go somewhere, whereas Alphred is just playing to his ego. However, if the Travellers do not humour him he will be increasingly annoyed at them which may lead to difficulties later.

GARINAEMBREIGHT

ANIMAL	HITS	SPEED
Garinaembright	29	12 m
SKILLS	Athletics (dexterity) 1, Melee (unarmed) 1, Recon 2, Stealth 1, Survival 1	
ATTACKS	Bite and Claws (4D)	
TRAITS	Heightened Senses	
BEHAVIOUR	Carnivore, Pouncer	

Note: This creature sometimes strikes to wound and frighten, reducing claw or bite damage to 2D or even 1D.



The activities along the beach do not include any scripted dangers, but it is still possible that Travellers (or the scientists) might fall in the sea, crash a dirt bike or otherwise create minor adventures for themselves. Overall, however, the scene at the beach is one of slightly bizarre yet strangely mundane work against the backdrop of two scientists with massive egos trying to outdo one another, whilst both know that only one of them is doing any actually useful work.

THE CITY

Mapping overflights of the bay and city region reveal that the seabed is strangely bowl-shaped just offshore, suggesting that a nuclear weapon detonated just above the surface or perhaps on the seabed, flattening much of the city's shoreline and dousing the rest in steam and radioactive seawater. More distant parts of the city were sheltered by the shore buildings, but have collapsed into overgrown ruins over the many years since. These were largely picked clean by survivors during the collapse of civilisation on Marduk, and are now buried under twisted vines and other vegetation.

The city is a fairly depressing place, and also rather eerie. It is possible to stand in the skeleton of a building picking fruit from a nearby bush (it is perfectly safe to eat; radiation levels have fallen over the years). There is a strange sense of presence about the place, as if it is not in fact uninhabited. Conventional wisdom says that Marduk's continents are abandoned, with the remaining population being island dwellers, but a careful search of the ruins will show signs of visitors. Carefully concealed campfires have burned here not long ago, and there are signs of meals coked over them.

Ronaldo is very excited by this discovery, and suggests that perhaps there is a continental populace after all. Or maybe visitors from an island came ashore? Or raiders from Oghma camped here for some reason? As he searches for more evidence to support his ideas, Travellers who have experienced the events of *Reach Adventure 1: Marooned on Marduk* may have to make a choice about what to reveal. Either way, Ronaldo's curiosity overcomes what little caution he possesses, and he starts wandering off on his own to search for clues. Fairly soon, he runs into trouble.

Whether alone or with others, Ronaldo has what some Travellers refer to as an 'animal encounter of the disagreeable sort'. Exactly how this plays out is up to the referee. For comic value, he may come racing out of a building pursued by a creature, or a more sinister game of cat-and-mouse might be played out with the Travellers slowly realising they are being hunted.

The creature Ronaldo has... found... is known as a Garinaembright in one of the local dialects, though the only way anyone would know that is if the Travellers have met the locals (and the creature) in a previous adventure. If not, then all they will know is that they have encountered a bristly-furred, long-legged dog-like quadruped, striped in grey and dingy brown, with long fangs and claws that let it climb as well as gouge and tear.

It normally moves quite slowly, almost silently, constantly sniffing the air and searching about with its orange-yellow eyes. When it wants to, a Garinaembright can surge into a fast rush or leap a surprisingly long way. It changes direction in a fast but ungainly scrabble of claws on the packed earth.

Garinaembreights are pack hunters, though initially the Travellers will encounter only one creature. It will seek to ambush but only slightly wound one of the group, with the intent of causing the others to rush into a massed ambush by others of the pack hiding in the ruins. They have moved between Ronaldo's party and the beach, hoping to take down several prey (including the Travellers) at once.

If Ronaldo realises this, he will be terribly excited at the realisation that this creature has adapted a strategy for hunting humans, and seems pretty good at it. He is sufficiently ivory-tower in his thinking that the immediate implications (for him at least) of this are 'research paper and maybe an academic award' rather than 'imminent threat of death'. Left to his own devices he would probably become a meal for the predators.

It soon becomes apparent that the pack is between the Travellers and their companions, and is clever enough to cut off any simple attempts to bypass it. Thus begins the game of wits between native predators and clever scientists. The Travellers might be able to battle through with whatever weapons they have brought but that seems very risky. Simply going around is obviously not going to work. The ruins are too cluttered to bring the pinnace in for a rescue. Perhaps they can come up with a clever stratagem?

The referee should encourage some creative thinking at this point. Exactly how many creatures there are is a matter for dramatic necessity, but there will be at least half a dozen in the ambush party. This could be a simple exercise in shooting the wildlife, though the referee should play the predators as smart as possible, and make it a hard fight if the Travellers take the direct approach. Hopefully they will be more creative, perhaps using people on the electrically-powered dirt bikes as a diversion to draw off the predators or even luring them into a clever counter-ambush.

There is no right or wrong solution to this problem. It is an opportunity for the Travellers to interact with Ronaldo and to deal with his complete failure of common sense, and engage in some problem-solving. The situation can be resolved with a straight fight, but it will make for a much more interesting adventure if the Travellers can be encouraged to engage in some clever and dramatic scheme to get themselves to safety.

LEAVING MARDUK

Assuming the Travellers manage to get back to the rest of their party reasonably intact, the scientists will be keen to finish up what they are doing and get back to the ship. They have obtained a large amount of samples and mapping data, and can now begin the work of analysis and collation. This will largely take place whilst in jump en route to Borite.

During the trip to Borite, the Travellers will be expected to assist with the mundane side of research – bringing what was collected on-planet to the lab, monitoring equipment and preparing samples for various forms of analysis. This might include lugger creature carcasses up the lab ship's access chutes and other unpleasant tasks. The Travellers will also have various theories and ideas bounced off them, which often takes the form of a stream of very long words interspersed with gestures that suggest the Travellers should be offering more helpful comments.

Naturally the scientists will fall to arguing from time to time as well, largely because Alphred feels the need to shoot down others' theories since he did not achieve anything of his own. By now the Travellers should be seeing just how dysfunctional the society aboard *Insight III* can be – especially if Alphred is annoyed at them over their actions on Marduk. He will feel let down and somehow insulted towards anyone who did not go along with his pointless 'research' on Marduk, and hell hath no fury like a celebrity scientist denied his share of the glory.



BORITE

The trip to Borite takes one week, terminating with a routine jump emergence and sensor sweep of the surrounding region. Not surprisingly, there are no other ships in the area. Borite has what the starcharts call a Class E starport, which essentially means it has no starport at all but people go there anyway. There is a customary landing spot close to one of the main settlements, where supplies and fuel are available from local traders. However, there are few of the usual amenities of a starport and no orbital facilities at all.

Insight III needs to be inserted into a parking orbit, after which the scientists can begin to transfer planetside. Their target area is hundreds of kilometres from the ‘port’, in a very sparsely populated area. There is no need to take on fuel – the plan is to refuel at Marduk highport before making the jump-2 transit out of the Oghma Cluster – but some fresh food would be welcome. Thus the first order of business is a trip into town for supplies, after which the crew will transfer over to the main target area.

IN PORT AT BORITE

Borite’s ‘port’ is run by the world government, the Borite Continuity Authority (BCA). Landing anywhere else on the planet without permission is strictly prohibited, but it is not clear what the BCA could do about it if the injunction were ignored. If the Travellers decide to make radio contact, they will be greeted over a distorted, static-wracked channel by a BCA official and invited to land. If they do not, the first the BCA knows about the incoming pinnace is when someone sees or hears it – there is no tracking station and few instruments of any kind.

If there is no warning, the BCA officials who run the port will be alarmed by the pinnace’s approach since it might be a raider from Oghma, and equally importantly their attempt to set up a proper reception will be hurried and a bit chaotic. Either way, observant Travellers will note that although there does not seem to be any tracking radar nor any proper ground defence weapons there are a handful of low-tech anti-aircraft guns around the port. These are manned and manually tracking the pinnace, though it is doubtful if they could do any real damage to it.

Once the BCA officials are sure that the incoming vessel is not a raider, the dog and pony show begins. Borite has a local Tech Level of 4 – about equivalent to the 1920s on Earth – with a few examples of higher technology available to those that can afford them. On many worlds these higher-tech items might be displayed as status symbols, but raiders from Oghma will seize high-tech equipment as readily as they will take literate personnel, so on Borite these items are normally kept concealed or are used only in well-guarded enclaves.

The dog and pony show is customary when friendly (or at least non-hostile) offworlders arrive. The Travellers will be greeted at the landing field by a delegation from the BCA, accompanied by an honour guard of smartly uniformed security personnel. They will be offered hospitality at the BCA complex nearby, and not coincidentally discouraged from wandering around the town unaccompanied.

The BCA officials want to find out about the newcomers, partly in case they are a threat and partly in the hope of fostering a relationship that could be useful. Borite receives very few ships, and fewer still return, but occasionally the BCA manages to talk a trader captain into a deal. This is important; Borite is desperately poor and even its elite are not well off by the standards of most worlds. A friendly trader who is willing to bring in goods at a discount price or to fill his spare cargo space with items that would be all but worthless elsewhere could improve the lives of many people.

Thus the new arrivals are treated to the best that Borite has to offer in terms of food, drink and polite discourse from BCA officials. How they present themselves will dictate how the Travellers are treated; if they can make the officials believe that a useful deal is possible they will be treated as minor celebrities. The scientists have little time for all this, except for Alphred. The others just want to negotiate for some fresh food and other supplies (there is disappointingly little on offer though) and then get on with their mission.

Alphred, on the other hand, is still stinging from the events on Marduk. Anyone else would be over it by now, but he feels the need to show how important and clever he is to restore what he sees as a dent in his reputation.

He thus holds forth about how he is an eminent planetary scientist who can solve almost any problem from poorly fertilised crops to bad radio reception.

The reaction of the locals to this will seem strange to those who do not understand society on Borite. Nobody even admits they can read in case they are targeted by kidnappers from Oghma, and here is someone advertising his capabilities! Some locals are actually offended at this conduct since it is simply 'not done' whilst others make shushing motions or suck their teeth through the embarrassed silence that follows. Alphred of course manages to construe this as a slight and is foul-tempered for some time afterward.

Despite this awkwardness, it should be possible to obtain clearance to land elsewhere on Borite (not that the BCA can actually stop anyone from doing that, but they can refuse to trade with those who do so and then return to their port) without undue hassle. Paranoid Travellers might suspect some sort of threat to Alphred, but nothing emerges at this stage. There is, however, a sour atmosphere aboard *Chubb* as the scientists prepare to relocate to their mission objective.

DOING SCIENCE ON BORITE

The mission area is far from the main populated areas of Borite, though there are a few settlements within a day's walk of the place. It is a reasonable site for a future town or even a spaceport; an area of flat (or flattish) land close to a lake. Orbital imagery shows signs of possible ruins in the area, which might bear investigation. However, recent events on Marduk suggest that caution is in order.

The first transit to the target area is a low-orbit 'bounce' direct from the starport, delivering the scientists and equipment for an initial survey at the target location. By the time this is done, *Chubb* will have returned to the lab ship and brought down bigger items of equipment such as the dirt bikes, camping gear and so forth. This will have to be unloaded to set up a base camp, after which work can begin in earnest. Or more likely, the scientists will want to start their projects whilst others do the manual work of setting up the camp. In this case, there will be added distractions as scientists call for assistance with their current tasks, all of which are of course more important than anything someone else might be doing.

During this initial period, Alphred and Henderson can be heard bickering as they examine orbital maps of the ruins. They are ostensibly arguing over where to look for artefacts and what the function of any given

structure might have been, but in reality the argument is about Alphred wanting to show how clever he is, and Henderson wearying of it. Meanwhile Maria wants soil and water samples, and badgers the Travellers with requests to plunge waist-deep into the lake and collect vegetation samples from the bottom ('Lake weed now? That's new,' calls a sarcastic Ronaldo).

Ronaldo tries to play peacemaker for a while, but eventually his temper frays too and he starts being as snarky as the others. He has little scientific work to do unless he wants to join in the argument over the ruins' significance, and that seems like a losing prospect right now. After a while he takes another look at readings for radioactive contamination, cross-referenced with initial readings for chemical and biological contaminants in the soil, and concludes the town that used to be here was not bombed or poisoned, but more than likely abandoned for other reasons.

Thus begins an intermittent debate as the other scientists find some piece of information that confirms or challenges this hypothesis. Anyone nearby is liable to be sent off to confirm a sensor reading or grab more samples, and gradually a working theory begins to appear. It seems that this town was spared the destruction that others received during the fall of the Sindalian Empire, and probably took in refugees. However, the soil of Borite is not very fertile anywhere, and there are indications that the region was over-farmed in a short period. Presumably starvation forced abandonment. But why would everyone leave? Surely the area would be able to support some people....

For a few moments, the *Insight III* team actually functions like it is supposed to. Brilliant intellects hurl ideas across the camp and consider counter-theories that come flying back. People scramble off to take new readings or find evidence to confirm or deny, and fire their findings back into the debate. The Travellers' thoughts (if any) are thrown into the mix as well, and for a while it is possible to see how this dysfunctional group of bickering egomaniacs can solve problems in record time.

And then....

CHANGES OF PLAN

In the middle of the brainstorming session, everyone's comms start squealing at the same moment. The noise goes on for just a few seconds but every spacer knows what it means – a distress call has been picked up and is being relayed from the lab ship's automated systems. Within moments Price is broadcasting from the ship to all groundside comms.

At first Price has little information to pass on. *Insight III* has picked up an automated GK (distress) signal from a vessel in the vicinity of the next body out from Borite, a small gas giant. The ship's transponder indicates it is a Type-A2 Far Trader named *Jolly Joel*, en route to Torpol from Noricum. Price is trying to get more information but what he knows so far is:

- The ship emerged from jump close to the gas giant, for whatever reason, and almost immediately began broadcasting a GK signal.
- Voice contact has not yet been established; the vessel's only transmission is an automated emergency beacon.
- There are no other ships detected in the system at present.

There is no unified body of interstellar law in this region, which lies beyond the fringes of the main polities, but most spacefaring worlds expect that vessels will go to the aid of another in distress. The chances of being prosecuted are slim, but port authorities could make trouble for a ship that declined to aid another if it suited their purposes. Thus there is no legal imperative to assist this vessel, but there might be consequences for not doing so.

This point may be academic, for two reasons. For one thing the scientists are basically decent folks who are inclined to help, and perhaps more importantly they have just been presented with a mystery. Why is this vessel where it is? What has happened to it? Wiser heads might wonder if this is not some clever trap laid by raiders from Oghma, but even this possibility will not dampen the raging curiosity that grips the camp. Within moments the scientists are all yelling at Price over their comms to get more data. Without anyone saying it, the decision is made – *Insight III* will go to the aid of this *Jolly Joel*.

The gas giant is the closest body out from Borite, but that still puts it a long way away – a four-day trip at the lab ship's maximum acceleration of 2G Thrust. As yet Price does not have enough data for anyone to estimate whether the distressed vessel can survive that long – he is naturally tasked with obtaining it while the scientists frantically pack up their camp.

It is obvious that the ship's pinnace, with its 5G Thrust, could make the trip much faster, taking a little more than two days. However, that means sending a rescue crew off into the unknown aboard a vessel that was not designed for habitation over a period of days. Equipment would be very limited, and the rescue team would be far from backup if something went wrong. This idea will be debated but will not find favour.

There is, however, an alternative. Two, actually. It may be that experienced spacers among the Travellers can come up with either or both of these ideas, or the scientists might suggest them. First of all, transit time calculations normally assume that the ship accelerates to the midpoint of its voyage and then decelerates for the remainder of the trip, arriving at a velocity suitable for docking or landing. If *Insight III* accelerates all the way to the gas giant, it would be possible to shave almost a whole day off the transit.

Of course, *Insight III* will then arrive at a very high velocity with no chance of slowing down enough to dock with the distressed ship... but she does not have to. She can drop her pinnace several hours from the target and then commence a braking manoeuvre using the gas giant's gravity. The lab ship will not be able to enter orbit and will have to turn around and come back – which will require at least a couple more days – but in the meantime *Chubb* can carry a rescue team to the trader, bring off any survivors and catch up to her parent vessel carrying them.

This plan even allows the scientists to pack up their camp properly, requiring two trips with the pinnace. The second will be quite lengthy, requiring several hours, but the 5G pinnace can overhaul the lab ship without difficulty. In addition, it might be possible to wring a little additional acceleration out of the lab ship by using an orbital slingshot away from Borite. This is a little risky, since getting the most acceleration means skimming the upper layers of Borite's thin atmosphere, but a team of brilliant scientists should be able to calculate it out properly.

The scientists are dead-set on doing this, and wave aside financial concerns from the Travellers. They will take care of any expenses and make sure the Travellers do not lose out. Other concerns, such as safety or the possibility that this is some kind of trap, are also pushed aside in a wave of problem-solving enthusiasm.

There are plenty of problems to solve, starting with getting critical personnel and some of the equipment back to the lab ship and beginning calculations for the orbital slingshot. Lynne will ferry personnel and equipment up with *Chubb*, requiring someone else to pilot the lab ship. There are choices to make regarding who will remain groundside with the equipment and come up on the second trip, and who will be aboard during the slingshot.

RESCUE

The rescue mission consists of three main parts – getting to the far trader *Jolly Joel*, boarding the distressed ship and interacting with the survivors, and getting away again. The first part will probably unfold more or less as noted in this chapter, although it is the nature of Travellers to find distinctly offbeat alternative solutions. What happens after the Travellers board the far trader depends very much on how they act, and how they react if they figure out the situation. The adventure could end with a rescue-as-planned, or a showdown aboard the trader, or even an attempt to hijack the lab ship. The trader crew and their motivations are presented here; their interactions with the Travellers will dictate what they decide to do.

WHAT HAPPENED ABOARD THE *JOLLY JOEL*

The Travellers may never unravel all the details about what happened aboard the far trader, nor why her crew made the decisions they did. There are reasons for everything that happened, however, and the crewmembers' choices made sense to them at the time.

Jolly Joel and her crew were down on their luck and long overdue for a refit. The ship had been operating on borrowed money for a while, and it was becoming obvious that without a stroke of luck the vessel was going to end up impounded or seized to pay her debts. That stroke of luck came, apparently, during a trade run to a remote area of Noricum.

Reduced to running low-value goods to farmers, *Jolly Joel* hoped to offset some of her operating costs by taking on a bulk load of salvage picked up by the locals. Checked and found to be clean of contamination, the salvage was then sorted during the jump to Borite. Much of it was as expected: recyclable metals and ceramics, a few small items of cultural significance that could be sold at auction and a small amount of valuable material in the form of electronic components and other complex items that could be broken down by a specialist salvage yard. The salvage load looked like it would have brought in a small amount of money, and certainly more than the locals were asking, but there was nothing unusual about most of it.

One container held something more interesting, and several days into the jump the far trader's crew made a proper examination of it. They were careful, and just as well, since it was an armoured naval transport container for a biological weapon dating from the fall of the Sindalian Empire – with the weapon still inside. There was virtually no chance that the biological agent would still be viable, but analysis of the remaining material might be of interest to someone working in the field. The Sindalians were very inventive in their weapons of mass destruction so even modern scientists might learn a thing or two.

It was decided to sell the weapon to whomever would pay the most for it. The ship needed funds badly enough that the morality of this plan was not questioned by anyone other than the ship's deck hand, William Helmaine. Helmaine was not a well educated man, and perhaps did not really understand the low level of threat the weapon posed... or perhaps he was just less desperate than the rest of the crew. Whatever the reason, Helmaine argued against the sale of the weapon and when nobody would listen, he resolved to dispose of it by dumping the container into the gas giant as the ship began its skimming run.

Helmaine's final attempt to reason with the rest of the crew resulted in a blazing row with the ship's engineer, Marix Ecker. Someone threw a punch, and in the middle of the ensuing beatdown Helmaine shot Ecker – more than likely in self defence. Another crewmember then fired on Helmaine, hitting critical powerplant components just as the jump drive was powering down.

The resulting explosion blew out part of a fuel tank and ruptured the hull in the drive rooms, killing one crewmember (the ship's medic) although Ecker and Helmaine, both wounded, were dragged out in time and put in the emergency low berths to stabilise them. This left the captain, Campion Delaney, with a crippled ship on a course that would take it into the gas giant.

The other two survivors, April Breune (assistant pilot and bridge officer) and Garv Alderley (groundside cargo handler, security guard and ‘negotiation assistant’) were just as desperate as Delaney. All three wanted to save both of their wounded companions – nobody wanted the fight or the shootings, and all were shocked at what had happened. They also wanted to salvage everything they could from the situation including the weapon and anything from the ship they could save.

Nobody had any ill-intent, but they were facing ruin even if they escaped form the disaster aboard their ship. A combination of greed and desperation coloured their decisions until they arrived at a place where even hijacking their rescuers’ ship might seem like a good option. They were not bad people, but they ended up making some very, very bad decisions.

THE SLINGSHOT

The slingshot is calculated out to a hair, but ultimately someone needs to pilot the lab ship through it. As previously noted, *Insight III* is a clumsy design made more difficult to fly by old damage. Carrying out the manoeuvre is a tricky job which involves some risk to the ship even if the pilot plays safe. Pushing it to gain every possible joule of kinetic energy from the slingshot is more hazardous, but will shave several hours off the transit time.

The manoeuvre is in three stages; insertion, slingshot and breakaway. It may be possible to abort the manoeuvre in reasonable safety after the insertion – the equivalent of easing off the throttle rather than powering through a dangerous curve – but this negates most of the gains that would be made. There is still some risk however.

With no slingshot, the lab ship breaks orbit and begins acceleration. It will reach the distressed vessel’s location in 76 hours under continuous acceleration, and will need to turn around and come back afterwards.

To set up the slingshot, an Average (8+) Pilot check (DEX, 3D minutes) is required for the insertion. If this check is failed the effect is the same as if there had been no slingshot manoeuvre. The ship suffers 1 hazard (see below) during the insertion whether or not the check is made. If it is made, the ship hits the critical point in the manoeuvre in fairly good alignment and the pilot can choose whether or not to proceed.

Aborting at this stage basically means easing off the thrust during the most violent part of the manoeuvre and losing most of its benefits. Success is automatic; the ship suffers no additional hazards and will reach the target in 72 hours.

If, on the other hand, the pilot chooses to proceed with the manoeuvre he will have to descend until the vessel is skimming the upper atmosphere (it is not designed for atmospheric flight; an error here could be fatal) and make a full-power orbital slingshot. Holding the ship in the critical alignment, balancing thrust and gravity, is a tense and dangerous task. The pilot must make a Difficult (10+) Pilot check (DEX, 1D minutes). Failing this check means that the ship loses most of the benefit of the manoeuvre – by the time the pilot has got his ship out of trouble he will have scrubbed off most of the gained velocity.

Failure of this check means that the transit takes 80 hours – longer than if the manoeuvre had not been attempted. Success brings the transit time down to 66 hours. Either way the ship suffers one hazard plus an additional one for every minute rolled on the Pilot check above (i.e. 2-7 hazards). The pilot can abort the slingshot manoeuvre at any time but loses its benefits as above. If he holds his nerve (and the ship does not come apart), breakaway is automatically successful unless a hazard has caused additional problems.

The referee should play the slingshot manoeuvre for tension and drama rather than just a couple of skill rolls (think of the slingshot manoeuvre in the film *2010: Odyssey Two*). The hazards encountered by the ship may cause the pilot to abort the manoeuvre, thinking the vessel is coming apart. The referee can enhance this by using the other characters who will be at least nervous and in some cases utterly terrified. Travellers might find themselves rushing to deal with some serious problem that emerges when the ship can afford it least.

Against a backdrop of heavy vibration, people yelling in alarm, groans from the hull and damage alarms going off, the pilot will have to decide whether to keep the hammer down or to abort the manoeuvre. Scientists shouting conflicting orders will just add to the general atmosphere of chaos and tension. If the ship survives, the Travellers will know that they have just pulled off something a little bit special.

HAZARDS

During this manoeuvre the lab ship will experience a number of hazards. These are mostly fairly minor problems which could have a purely dramatic effect or cause at most slight inconvenience. Some, however, are pretty serious and all are alarming. The referee should not tell Travellers exactly what is happening, but rather should narrate what they can see and hear. A fairly trivial incident could seem very serious, prompting a frantic response to what turns out to just be a sliding tool container.

Roll 2D for each hazard. The same hazard can occur more than once, in which case the referee should describe a similar incident in a different location. Hazards followed by an exclamation point (!) are potentially serious and require explanation below

2D	Hazard
2	Hull breach!
3	Thrust imbalance causes control loss!
4	Air Leak!
5	Small fire breaks out
6	Small items shift and break
7	Horrible noises from the hull, but no damage
8	Partition walls warp; some cabin doors no longer close properly
9	Momentary internal power interruption; scary but not serious
10	Major Fire!
11	Major power loss!
12	Hull Damage!

Hull breach!: A randomly determined compartment suffers a significant breach due to popped hull panels. Decompression of the affected compartment will take 1D minutes. Iris valves will seal off decompressing compartments unless there is also a power failure. Repairs will probably require someone to go outside with a repair kit and seal the damaged section. This cannot be done whilst the ship is under acceleration, but will not take very long (1D hours per compartment).

Thrust imbalance causes control loss!: Despite the pilot's best efforts, control is momentarily lost and the ship begins to tumble out of control. Crew will be flung around for 1D damage unless they are strapped in. The pilot can abort the slingshot and automatically correct or continue and attempt a correction on the fly. The latter requires a Difficult (10+) Pilot check (DEX, 1D minutes). If it is failed, the ship suffers one hazard every minute. The pilot can try again after all hazards have been resolved for his last failed attempt. Repeated attempts can be made until the pilot succeeds or the ship comes apart. A correction without aborting does not affect the time taken for the transit; aborting increases transit time to 80 hours.

Air Leak!: A randomly determined compartment springs a small leak. This will be fuel rather than air if a fuel tank is selected. Decompression of the affected compartment will take hours, but the ship can only afford to lose so much air. Repairs can be made from inside the vessel. Note that whilst this hazard is actually quite minor it will trigger decompression alarms and the sealing of iris valves around the affected compartment. Spacers rightly fear air loss, and may not know how minor it is.



Major Fire!: A minor fire will not cause much damage, but a major one is very serious. The ship does have internal suppression equipment but it can barely keep pace. A major fire will require the attention of crewmembers in addition to the automatic systems. If it is not dealt with, a fire will absorb oxygen (that is a bad thing aboard a space vessel) and damage control systems as well as gutting the compartment which is on fire. Fighting a fire manually requires an Average (8+) Mechanic check (INT, 2D minutes).

Major power loss!: This is one of the worst things that can happen during a hazardous manoeuvre. Failsafe systems cut the power to the drives and other high-draw systems, leaving the ship unable to apply thrust in the middle of the manoeuvre. This could cause a catastrophic crash if it occurs during the slingshot phase. To avoid this, power must be restored, requiring an Average (8+) Engineering (power) check (INT, 1D minutes). If the first attempt is successful, the manoeuvre goes on as before. If subsequent attempts are required then the pilot must make a Difficult (10+) Pilot check (DEX, 1D minutes) to compensate. If failed, the pilot must choose whether to treat the situation as an aborted slingshot or to make another attempt, suffering one hazard per minute.

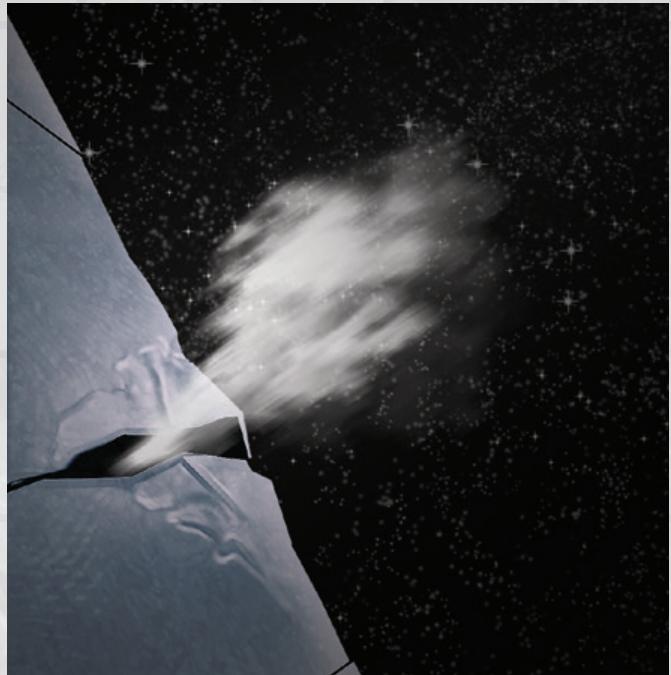
Hull Damage!: A section of hull is warped and twisted, shedding some minor debris and venting a random compartment to space. The ship loses 3D Hull – if this happens too many times, *Insight III* could start to break up.

A DRAMATIC SCENE

The slingshot attempt is not intended to be something resolved with a couple of dice rolls. It is a dramatic scene where there are choices to be made quickly and with limited information. Travellers other than the pilot will be busy responding to alarms and scary noises from the hull, either trying to fix problems or to figure out how serious they are. The decision to proceed or not should be a difficult one, and at the end of the manoeuvre the Travellers should feel they have pulled off something difficult... and wonder what the price will be.

IN TRANSIT

Once the slingshot is complete (or the lab ship has begun thrusting towards the gas giant in a more conventional manner), the time taken for the transit is more or less fixed. There will still be a lot to do – stowing gear brought up from the surface, fixing damage to the ship and its various components and so forth. Even quite minor damage caused by the slingshot can be a problem – for example if a water feed pipe to the galley became distorted the ship may now have



in internal leak which will potentially cause further damage. In addition, the water loss could become significant and of course the galley will be inoperable.

There are thus a number of tasks to be attended to, some of which are more urgent than others, in addition to preparing the pinnace for its rescue mission. That means rounding up tools and equipment from wherever they have been left lying around and setting them up in an orderly fashion aboard the pinnace. Contact must also be established with the distressed far trader, which has so far been impossible.

As with the slingshot manoeuvre, the referee is encouraged to make more of the situation than a few skill checks. If the Travellers or their employers can come up with a clever idea for a way to boost signal reception, they will then be able to implement it during the flight. In short, the Travellers should be encouraged to roleplay their solutions to problems rather than relying on a skill check.

Once contact is finally established, the situation aboard the far trader *Jolly Joe* becomes apparent. The ship has apparently suffered serious damage; video transmission is hopelessly garbled although it is possible to pull a few stills of a typically battered far trader bridge out of the mess. The comms station is manned by a human male probably aged around 50, who is wearing a vacc suit with the faceplate open. He is busy with the flight controls as well, but can provide some information. Most statements have to be repeated more than twice, but the following information can be pulled out of the static soup.

- The man on the bridge is the ship's captain and pilot, Campion Delaney.
- *Jolly Joel* has come from Noricum (Delaney does not say what she was doing there).
- The ship was en route for Torpol 'by the back roads' and intended to make a gas giant refuelling here.
- An incident of some kind occurred not long after the ship exited jumpspace.
- The drives are damaged, two of the crew are severely injured and in emergency low berths.
- The other two crewmembers, referred to as 'Garv' and 'April' are trying to make emergency repairs but the engineer was among the casualties.
- The ship's vector is carrying it towards the gas giant, though not directly. It will be drawn in and will fall into the atmosphere, but Delaney cannot accurately estimate when.

At this point in proceedings, *Insight III* will reach the far trader's approximate location in 66 to 80 hours, depending on what manoeuvres were made. She will then go screaming past at high velocity and require at least two days to return, but if the pinnace is dropped about 20 hours before contact it can decelerate to make a docking around 10 hours before the lab ship would get there. So, if the far trader is still intact 70 hours from now, a rescue can be launched.

Calculations aboard the lab ship indicate that it will not be, however. Without thrust, the ship's vector will carry it into the gas giant's atmosphere in about 60 hours; definitely before the pinnace can get there. However, if the lab ship's crew can talk the survivors aboard *Jolly Joel* through a jury-rig operation they should be able to expend the ship's drive system in a couple of big blasts that will ruin the drive but provide enough vector change to put the ship into a slowly decaying orbit rather than a catastrophic collision course.

While this is going on, the pinnace is readied after which there is little to do but wait. Finally, about 20 hours from the point of closest approach, *Chubb* pulls free from *Insight III* and begins a hard deceleration that will bring her into docking range. The drive blasts seem to have worked well enough; *Jolly Joel* has gained a few more hours before she hits atmosphere and begins to break up. However, her comms seem to be fried; she goes off the air and does not respond to any further communication. Her power emissions are also greatly reduced – she might have some emergency power left but to all intents and purposes she is a dead ship.

THE MISSION CLOCK

Once *Insight III* begins her rescue flight, the referee needs to keep track of the 'mission clock'. There is no precise instant at which the clock terminates in the sense of 'after 92.47 hours the far trader explodes' but the level of hazard experienced by the rescue crew will increase after a certain time and the situation will continue to deteriorate after that. It may not be apparent exactly when the 'last second' will come, which will make some decisions difficult ones.

Taking the moment that *Insight III* begins her rescue run as zero, the far trader will encounter the outermost layer of the gas giant's atmosphere after 57 hours. This is increased to 68 hours if the scientists manage to talk the far trader's crew through a jury-rig of the drive but no further delay is possible after that.

Once in the upper atmosphere, the far trader begins to experience drag and buffeting which makes all tasks aboard it and in close proximity – such as docking a pinnace – much harder. DM-1 applies to all tasks attempted after this time. Once in the upper atmosphere, the referee should roll 2D each hour, applying a cumulative DM+1 every hour after the first. If the score is greater than 12, the far trader has descended into the next lower layer of atmosphere.

From this point, the ship is doomed in a matter of minutes, though a powered and streamlined vessel could still fly to safety. The referee should roll 6D. This is the number of minutes the ship has before escape will become very difficult. The Travellers should not be told the exact deadline but will get a broad hint in the form of buffeting, heating of the hull, turbulence and frantic calls from the lab ship telling them to get out of there RIGHT NOW.

After this time has elapsed, the far trader begins to tumble and descend rapidly. Escape might still be possible if the Travellers can somehow reach the pinnace, but they have only 2D minutes to do so before the far trader breaks up around them. This is not survivable.

Thus the timeline for the far trader *Jolly Joel* (assuming the drive is jury-rigged to buy more time) is:

68 Hours: Vessel enters atmosphere and suffers minor turbulence and heating effects. DM-1 applies to all skill checks associated with physical activity.

Probably 5-7 hours later: Trader enters deeper atmosphere.

Probably 20-22 minutes later: Trader begins final plunge.

Probably 6-8 minutes later: Trader begins to break up.

The lab ship will reach its point of closest approach approximately 66-80 hours from the start of the rescue bid, which means that the pinnace can be there 56-70 hours in. The best-case scenario allows an almost leisurely 12 hours aboard the far trader. A less effective slingshot manoeuvre leaves a lot less time to do whatever is necessary.

BOARDING THE JOLLY JOEL

The far trader is clearly in bad shape. She is trailing debris from her stern section, and it looks like the drive rooms may be open to space. Her hull has another large dent on the port side, suggesting an internal explosion of some sort. A fuel detonation is a possible cause. The rest of the hull is intact but there are no signs of life.

Players new to *Traveller* might want to do the standard ‘scan for life signs’ routine encountered in many science-fiction TV shows, but there are no ‘life scanners’ as such available at the Tech Levels commonly encountered in the Sindal subsector. Clever Travellers might be able to figure out a way to determine if there are living people aboard the ship from analysing air leakage and heat patterns, but other than this the only way to find out is to board her and find out.

The far trader is not under thrust but is tumbling slowly. This makes for a tricky but not unduly hazardous docking, providing the pilot can take their time. They will not want to keep undocking and docking again, however, since every repetition increases the chance of something going wrong. Besides, there is really nowhere to go – *Insight III* is hours away and there are no other ships nearby.

The far trader’s airlock seems intact, but proceeding through it takes the Travellers into a dark, deserted and rather eerie passenger deck. Artificial gravity is off, though there is just enough emergency light to make familiar shapes seem strange and threatening. Objects float about, but thankfully no bodies.

The referee should play the initial boarding for tension; the Travellers have no real idea what to expect aboard the distressed far trader, after all. However, there are no threats to be found in the cabins; just personal effects belonging to the crew. While they are searching, the Travellers may become aware that there is someone in the elevator shaft. If they fail to spot him, the trader’s captain might appear rather suddenly among them and cause some alarm.

Captain Delaney has climbed up the elevator shaft using the emergency elevator. He is wearing a vacc suit with the faceplate open, through which the Travellers can see he is haggard and weary. He has an autopistol holstered at his belt, but is not making any threatening moves. Indeed, he is eager to express his pleasure at seeing the Travellers, and happy to provide what information he can. He does, however, leave out some of the details.

Captain Delaney’s explanation is interrupted by demands for clarification and additional information over the radio from the scientists (or in person if any of them came on the rescue mission). Some of the things they want to know seem nit-picky or irrelevant to the Travellers, though this perception may not always be correct – it can be hard for the layman to tell what might be vital information to an expert and what is just the academic curiosity of people who live in an ivory tower.

The short version, presented by Captain Delaney, is that the drive seems totally inoperable and the drive rooms are heavily damaged. One of his crew is dead (her body went out into space when the drive rooms were ruptured) and two others are badly injured and in low berths for lack of a medic. He says that the incident was ‘some kind of fuel line rupture or something; our engineer was hurt but he’ll surely be able to explain once he’s recovered’ and does not mention how the explosion came to happen. The ship’s presence on Noricum is described as ‘routine chicken-swapping’ which is a fairly decent shorthand for the sort of low-value trading that goes on there, and is certainly plausible (and also more or less true). He adds that he has two crew alive and trying to make repairs and that the ship has gravity and life support on the lower (cargo/flight systems) deck.

Delaney seems genuine (and most of what he says is correct) and his agitation is understandable under the circumstances. He is hoping that his ship can be somehow saved, and is keen to show the Travellers his damaged drive section. Even once he is told nothing can be done about the drive, he insists that something is possible, and after that starts coming up with unworkable plans to tow the ship to safety using the pinnace. All of this is more or less what would be expected from a man in his position.

The Travellers are given free run of the ship, though Delaney tries not to let them examine the low berths too closely. Other than that, everything is as might be expected. The main cargo hold contains numerous crates of low-value goods, several piles of sorted scrap and salvage, and boxes of ‘general trade goods’ of a sort often bought cheaply at mid-tech ports and sold or given away in small quantities to locals at low-tech or backwater worlds. In short, there is nothing to indicate that Delaney’s story is not true.

SALVAGE OPERATIONS

Delaney and his two remaining crewmembers at first want to cling to the hope that their ship can be saved, and it might take some time to determine that this is not going to be possible. It will eventually become apparent (though the crew may still not accept it) that the *Jolly Joel* is beyond saving. People and cargo might be salvaged, however, along with valuable components from the ship.

How long the Travellers have for this will be uncertain, though it is obvious that there is no time to send the pinnace to the lab ship and back. Anything and anyone that is leaving the trader has to be aboard *Chubb* when she undocks. There are possible questions about salvage and ownership of items removed from the vessel, but there is not really time for a legal debate. Delaney and his crew are over a barrel, so to speak, and would have to agree to any set of terms associated with a rescue, but they are also pondering other options... options that would have been unthinkable if they had not recently wounded one of their own crew in the gunfight that caused the problem.

Delaney asks questions about the Travellers' parent ship which sound reasonable enough – such as how much space it has to salvage his cargo and if its life support can cope with the extra personnel. The latter could be interpreted as an attempt to find out how many crew

the lab ship has aboard and how well they could resist a hijack attempt. He reluctantly begins making plan to move salvageable items to the pinnace ready for an evacuation, and of course the two low berths must also be moved.

Bringing the two casualties out of their low berths would be risky in *Insight III*'s medical lab. Doing it in the pinnace or the trader would be basically murder. The units can be stripped down to be moved, a fairly lengthy task which reduces the amount of space they take up dramatically. The low berth units would have to be quickly moved to the pinnace and connected into its power systems, but unless something goes wrong this will not endanger the casualties.

Of course, moving anything through the passenger deck to the airlock is a difficult business in poor light and minimal gravity, and everything that leaves the ship has to go through there. Delaney would prefer to delay any movement or inspection of the low berths just in case someone realises that the occupants have gunshot injuries, but his conscience will not permit this – in fact he insists that they be moved as soon as possible, before the cargo. Delaney and his crew would sell an old bioweapon or even shoot a crewmate in a brawl, but they would not leave behind someone who up until today was a friend unless it was entirely necessary.

There is no reason to make a detailed medical examination of the casualties, but Maria might want some data and force Travellers to take an interest.



A cursory examination of the low berths shows that the occupants have suffered the sort of injuries that might be expected under the circumstances – bloody faces, bandages on other parts of the body applied by crewmates, cuts and abrasions. The fact that both have a gunshot wound is not immediately obvious whilst they are in the low berth units, though it would be readily apparent if the cryotubes were opened.

Similarly, Travellers who enter the depressurised drive rooms will see evidence of an explosion in one of the fuel-feed systems, as described by Delaney. The fact that shots were fired in the drive rooms will not be immediately apparent, but the evidence is there if someone looks closely. Cartridge cases and the guns themselves are long gone, blown out of the ship when the deck depressurised.

Delaney and his crew are keen to salvage as much as possible from their ship. They want to pull critical electronic circuits as well as removing the most valuable parts of their cargo. These include several crates of medium-value electronic and machinery spares and parts, plus the fairly nondescript (but very heavy) armoured crate containing the bioweapon. These higher-value items are stowed in the aft cargo hold and must be manhandled all the way to the forward lift before being dragged up the (fortunately zero-g) lift shaft and across the passenger area.

All of this takes time, and that may be in short supply. As a rule of thumb, any given piece of salvage work takes $2D \times 15$ minutes divided by the number of people working at it. Thus for two people to strip one of the two low berths and move it to the pinnace takes $2D \times 15$ minutes divided by two, typically around 45-60 minutes. Each relevant level of skill (such as Mechanic or Electronics) reduces this time by 10%, to a minimum of half the time taken for unskilled Travellers.

Once persuaded that their ship is lost, the crew are willing to help save as much as possible, but they are aware the bioweapon might be recognised as at least being something out of the ordinary. On the other hand, it is the most valuable item remaining to them, and their best chance at a fresh start once they get away from here. They will certainly not want to leave it behind.

Delaney and his crew have gone from financially embarrassed shipowners to flat broke in a few hours. They know that whatever they take off their ship is all they will have to their name, and there are two obstacles confronting them. One is getting salvage to the pinnace, and the other is the crew of the lab ship.

Delaney and his people have no ill intent towards the Travellers – they are very grateful for the rescue – but they are acutely aware that any share of the salvage value essentially takes away part of what little remains to them. Delaney would – reluctantly perhaps – agree to a deal whereby the lab ship gave his people passage to a decent port where they could sell their salvage and took up to 25% of the value as a fee. He could be persuaded to accept losing up to half of the salvage. If the Travellers want more than that, they will be pushing him too far.

There are other reasons Delaney and his crew might turn hostile. If the Travellers piece together part of what has happened and make accusations, one of the crew might panic. The same applies if the crew think they are going to be abandoned aboard their doomed ship. An argument over the bioweapon, if it is discovered to be such, could also ignite violence.

If the Travellers keep things calm and do not try to impose an unacceptable deal on the crew of *Jolly Joel*, then it should be possible to remove a reasonable amount of salvage and get to the pinnace in time to escape. Much depends on the actions of the Travellers here – behaving like jerks in such a highly-charged environment might push the desperate trader crew over the edge.

If that happens, the only option left to Delaney and his people is to eliminate the rescuers and take their pinnace. Delaney is cunning enough to try to conceal what he has done (if it comes to this), presenting the loss of a Traveller or even all of them as some new accident. His on-the-fly plan in this case is to try to convince the lab ship crew (and any of the rescuers who did not witness what really happened – if not all the Travellers went over to the far trader, you might find it fun to keep the others in a separate room while the rescue takes place...) that their comrades were killed in an accident, and to get aboard *Insight III*. As a backup plan, it would be possible to make the long and uncomfortable flight to Borite aboard *Chubb*. Either way, Delaney needs the pinnace and will kill to get it if he has to.

This outcome would represent a tragic end to the tale of *Jolly Joel*. Her crew were not bad people but they did make bad decisions out of desperation, and once they had done a little evil they could not stop. Delaney would much rather be taken to the lab ship and get out with as much as he can salvage – perhaps even talking his way into a job aboard *Insight III*.

As with other parts of the adventure, these matters could be resolved with a couple of skill checks, but the adventure will be far more memorable and entertaining if the referee plays for drama. A tense situation aboard a doomed ship, with the Travellers gradually becoming aware that something is not quite as presented by the trader's crew, creates the potential for many roleplaying situations and a variety of outcomes.

CONFRONTATIONS AND RESOLUTION

It is entirely possible that the rescue will end with the survivors conveyed back to the lab ship, which requires a flight of several hours aboard *Chubb*. There is not much room, everyone is stressed, and of course at any moment someone might spot the bioweapon or the gunshot wounds, or ask the wrong question. However, even then there is no reason why the situation cannot be resolved with some negotiation.

The same comments apply once the survivors are aboard the lab ship. If Delaney and his crew are pushed far enough they might decide that the only solution is to hijack *Insight III*. As noted elsewhere, actions of this sort would have been unthinkable a few days ago but circumstances might make desperate action seem necessary.

The Travellers and their companions might never realise how much danger they were in... or, depending on their actions, they might not really be in any danger at all. If the Travellers play fair by the rescuees it is entirely possible to have an argument over the bioweapon or an uncomfortable revelation of the truth of what happened without it spilling over into violence. However, everything depends upon how the Travellers treat the rescuees, what questions they ask and how they react to the answers.

Thus the adventure can end amicably or in a bloodbath. If Delaney and his people try to hijack *Intrepid III* or *Chubb*, they will more than likely do so in response to a deteriorating situation and, more importantly, with reluctance. This will make them rather poor hijackers, who are likely to get themselves killed. A subsequent investigation and questioning of the survivors might reveal the tragic chain of events that led to a basically decent trader crew trying to betray their rescuers and steal their ship.

Either way, the scientists will decide to jump back to Marduk to obtain medical assistance for the survivors at the highport, and will then head on to Noricum or straight to Thebus. They will honour their agreement with the Travellers and pay them what is owed. It is possible that smart Travellers will already have obtained the starship parts they need from the stricken far trader. Captain Delaney would readily agree to let the Travellers have some parts from his drive (which is about to be destroyed) as part of a deal that he considers fair, though if the situation ends in bloodshed there might someday be an investigation into why the Travellers' ship is using components from a vessel that met a violent end.

These events are for the referee to resolve. We have outlined the motivations of Delaney and his crew, and how they came to be in this position. What they do next is very much dependent on the behaviour of the Travellers.

AFTERWARD

The lab ship has not fully completed its mission on Borite, and there will be some debate about whether or not to continue. One likely outcome is a decision to proceed back to Marduk and refuel at the orbital port before proceeding to Noricum and finally to Thebus as planned. However, these are matters for the scientists, rescuees and Travellers to discuss. The scientists will honour their promise not to let the Travellers be out of pocket, but exactly how that happens is a matter for negotiation.

Thus where the lab ship and its oddball crew go after the rescue depends very much on its outcome and any subsequent discussions. It may be that the Travellers (and/or some of the rescuees) join the crew on a long-term basis. Or they may encounter one another again under less stressful circumstances. This could be just the beginning of an epic voyage of science across Sindal subsector...

THE CREW OF *JOLLY JOEL*

CAPTAIN CAMPION DELANEY

SPECIES	GENDER		
Human	Male		
STR	7	INT	9
DEX	8	EDU	8
END	5	SOC	8
EQUIPMENT		Autopistol (Damage 3D-3) Vacc Suit (Armour 8)	



GARV ALDERLEY - CREWMEMBER

SPECIES	GENDER		
Human	Male		
STR	6	INT	8
DEX	7	EDU	9
END	8	SOC	9
EQUIPMENT		Snub Pistol (Damage 3D-3) Shotgun (Damage 4D) Vacc Suit (Armour 8)	



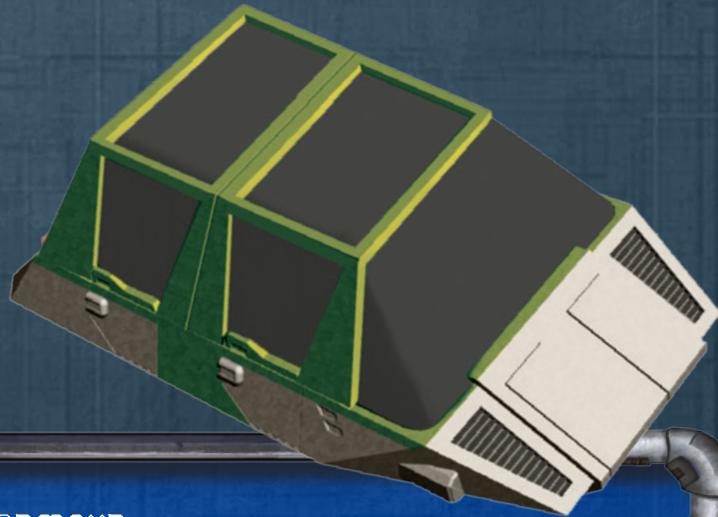
APRIL BREUNE - 1ST OFFICER

SPECIES	GENDER		
Human	Female		
STR	6	INT	8
DEX	7	EDU	9
END	8	SOC	9
EQUIPMENT		Autopistol (Damage 3D-3) Vacc Suit (Armour 8)	



SEALED AIR/RAFT

A logical development of the basic air/raft, this version provides the same ubiquitous functionality but features a sealed crew compartment to allow high altitude and orbital travel without passengers wearing vacc suits. It is commonly found on worlds with poor or no atmospheres, and on board spacecraft as an auxiliary vehicle. While fully protected from vacuum, it has no integral airlock and so care must be taken in use.



TL	8
SKILL	FLYER (GRAV)
AGILITY	+1
SPEED (CRUISE)	HIGH (MEDIUM)
RANGE (CRUISE)	1000 (1500)
CREW	1
PASSENGERS	4
CARGO	0.25
HULL	16
SHIPPING COST	4 TONS CR271000

ARMOUR

FRONT	2
SIDES	2
REAR	2



EQUIPMENT AND TRAITS

AUTOPilot (FLYER 1), COMMUNICATIONS(TL8), COMPUTER /1 (DATABASE), ENTERTAINMENT SYSTEM, NAVIGATION (BASIC), SENSORS (BASIC), SHORT TERM LIFE SUPPORT, VACUUM PROTECTION

NOTE: A cargo carrying version of the Sealed air/raft is available. This has Crew: 1, Passengers: 0 and Cargo: 1.5

DIRT BIKE

Electrically powered, this dirt bike features simple, rugged construction, making it easy to keep in service with little more than a thorough clean after use. It is extremely durable and highly efficient batteries provide a decent range after a full recharge.



TL	8
SKILL	DRIVE (WHEEL)
AGILITY	+1
SPEED (CRUISE)	HIGH (MEDIUM)
RANGE (CRUISE)	440 (660)
CREW	1
PASSENGERS	1
CARGO	0
HULL	4
SHIPPING COST	1 TONS CR6300

ARMOUR

FRONT	2
SIDES	2
REAR	2



EQUIPMENT AND TRAITS

ATV, COMMUNICATIONS(TL8), NAVIGATION(BASIC), OPEN VEHICLE