

IRDYNA FERYDO



# PATHFINDER

The Anoikis Field Manual



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**Volume I: Pathfinder**

**Irdyna Ferydo**

**Unsettling Whisper**

*A Corporation of Quietly Eerie*

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# Preface

There is a particular kind of silence after a Wormhole transit. The ship is still. The connection hangs close behind it. The interface is familiar enough to tempt the pilot into finishing the picture before the system has supplied the facts.

That silence is where this book began.

Anoikis does not lack instructions. Pilots have written excellent guides, built remarkable tools and passed hard-earned habits from one generation of explorers to the next. A new Pathfinder can learn which probes to carry, how to name a Bookmark and which window to watch. All of that knowledge matters.

What is harder to pass on is the moment between seeing and acting. That is when an empty display feels reassuring, an old route feels familiar, or a clean scan feels complete. Nothing may be wrong with the observation. The danger lies in asking it to say more than it can.

I wanted a book for that moment.

Not another list of commands, and not a catalogue that must be memorised before undocking. I wanted a companion to judgment: something that could show why a Bookmark matters after its label has become obvious, why the age of a report belongs to the report itself and why a way Home is never merely a line on a map.

*Pathfinder* therefore begins slowly. It spends time on the view from the threshold before it asks the reader to move beyond it. Later volumes will reach deeper operations, heavier commitments and decisions shared across more pilots. This first volume stays with the foundations because every advanced method eventually rests on them.

The pages ahead will not make Anoikis predictable. They should make it more legible. They should help a pilot notice when knowledge has

become memory, when silence is being mistaken for safety and when a plan depends on something that has not actually been established.

If the book succeeds, the reader will not finish it with a perfect answer for every system. The reader will finish with better questions, a steadier sense of what the available information can support and the habit of looking once more before certainty takes the place of observation.

Routes disappear. Judgment must travel without them.

**Irdyna Ferydo**

# How to Use This Handbook

Read this book once when nothing is demanding your attention. Return to it when something is.

The first reading builds the route through the ideas. The later reading is more practical: a chapter can help recover a question, check a habit or give a Fleet Member enough context to understand a decision. The handbook is meant to move between those two uses without requiring the whole route through it each time.

## First Passage

Begin with the Introduction and follow the chapters in order. The early pages establish the language used later for routes, observations and uncertainty. You do not need to memorise each detail. Pay attention to the places where the book changes the meaning of something familiar: an empty Local window, a scan result, a Bookmark or a route that was reliable a few minutes ago.

Keep your own experience close. If the text and the client appear to disagree, do not force one into the other. Note the difference and verify it. A field manual remains useful only while it can survive contact with the field.

## Reading the Terms

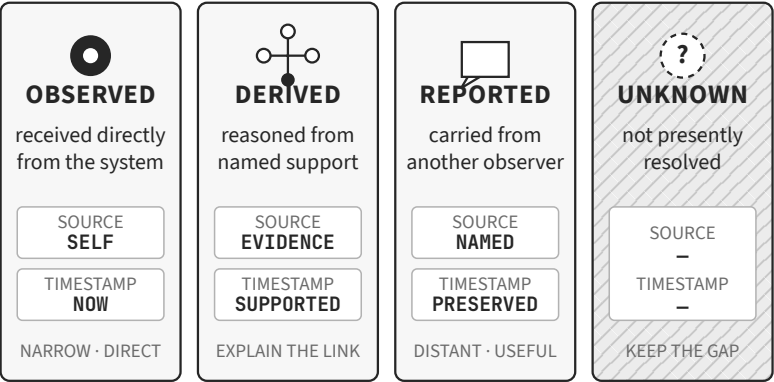
Several ordinary words carry narrower operational meanings in this handbook. Capital letters keep those meanings visible.

Observed, Derived, Reported and Unknown name information states. Observation, Source and Timestamp identify the evidence, origin and age supporting a record. Grid, Chain and Home name the immediate space, the known shape of access and the destination an operation intends to reach.



Lowercase uses retain their ordinary meaning. Pilots can observe something without yet preserving an Observation; a system may be unfamiliar without every empty field becoming Unknown. The distinction is functional, not decorative.

**INFORMATION STATE • NOT SAFETY RATING**



**DECISION BOUNDARY**

What does this state support — for this action, at this time?

**NONE OF THE FOUR MEANS SAFE**

**Figure AFH-B1-FIG-001 — Four states describe how information is known.** Observed, Derived and Reported information preserve their relationship to a Source and time. Unknown keeps an unresolved gap visible. None of the four states is a safety rating.

**In the Field**

Do not read a page while the situation requires you to fly the ship. Use the chapter titles and contents to prepare before an operation or to review one afterward. During quieter moments, return to the passage that explains the question behind the action rather than searching only for the next command.

The book returns to one working rhythm: observe, record, understand, evaluate, decide, act and observe again. Its pace changes with the situation. The same rhythm can occupy a few seconds on a Grid or follow an entire route through a changing Chain.

## **After Return**

Review decisions as well as outcomes. A safe return does not prove that the reasoning was sound, and a loss does not prove that every decision was wrong. Ask what was known at the time, what was only assumed and which change made the old picture unusable.

This is also the right moment to improve Bookmarks, notes and shared records. The next pilot should inherit the Observation and its age, not merely the confidence of the person who recorded it.

## **Keep It Current**

EVE Online changes. Interface labels, values and mechanics in this edition are checked during publication, but the live client and current official sources remain authoritative. Examples in the handbook explain relationships; they are not live intelligence or a promise that the next system will repeat them.

Use community tools and shared maps as extensions of memory, not replacements for judgment. When a record is old, mark it as old. When a fact is unknown, leave room for it to remain unknown.

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# Introduction

## A Different Geography

In Known Space, a route can be written before the ship leaves dock. The system names change from step to step, but the network beneath the plan is expected to remain. The map waits for the traveller.

Anoikis reverses that relationship. The traveller often arrives before the map does.

A Wormhole is a connection that exists now. Time works against it. Every transit contributes to the mass it has carried. It can be scanned, crossed and named without ever becoming permanent. The line drawn on a map is not geography in the old sense. It is a report about a relationship that was available when someone observed it.

That difference changes the meaning of *Where am I?* The system name remains useful, but it cannot describe the route by which the ship arrived or the way it may leave. A Pathfinder also needs the connection behind the ship, the other routes that have been found, the time attached to those findings and the gaps no one has yet closed.

An Anoikis map is never the territory waiting to be copied. It contains only the part a pilot or group has managed to encounter, remember and keep current.

## Four Information States

Imagine a scout arriving in a system with a Structure on the Overview, no name in Local and a Shared Map that was last updated twenty minutes ago. The screen is already full of information, but it is not all the same kind. Four simple states keep those differences visible.

## **Observed**

The Structure is visible now. The scan returned a result now. The ship entered through this Wormhole. These are observations: things the pilot or client has just received from the system.

They are valuable because they have little distance from the event. They are also narrow. Seeing the Structure does not reveal who is awake. A scan result describes that scan, from that position, with those settings. Observation gives the map its firmest marks, but not the whole story around them.

## **Derived**

The scout knows the system entered before the transit and the system visible after it. From those observations, the scout can derive that the connection currently relates the two. The conclusion is strong because its supports are clear.

Derived information becomes dangerous only when the reasoning disappears. A label may survive after the observations beneath it have changed. A useful record lets the next pilot see both the conclusion and the path that produced it.

## **Reported**

The Shared Map, another scout's message and an old Bookmark carry information from somewhere else. They may extend the present pilot's vision far beyond the current Grid. They also arrive with distance: another observer, another time or another purpose.

A report becomes easier to trust when its origin and age travel with it. Who saw the connection? What exactly was recorded? Has anyone crossed it since? A report without those answers may still guide a decision, but it should not be mistaken for a fresh observation.

## **Unknown**

No name in Local leaves the presence of silent pilots unresolved. The Structure's current use is unresolved. The condition of a connection

since the last report may be unresolved. These are not empty spaces waiting for a convenient answer. They are Unknown.

Keeping an Unknown visible is useful work. It prevents confidence from filling a gap simply because the map would look cleaner without it. Scouting does not remove every Unknown; it discovers which ones matter now and which can remain open while the operation continues.

## **The Pathfinder's Work**

The work of a Pathfinder becomes visible when someone else must rely on it. A connection found but poorly recorded is little more than a private memory. A route copied without its age can look more certain than it was. A warning with no source may spread faster than the event that caused it.

Good Pathfinder work gives the next decision something solid to stand on. It finds and identifies connections, preserves where and when they were seen and keeps observation separate from interpretation. It notices when an earlier answer has gone stale. It leaves a way forward, back or around the problem without pretending that any of those ways is guaranteed.

Speed still matters. A perfect record delivered too late is not useful. Yet a fast route whose uncertainties have been hidden is not truly fast; it merely moves the cost of discovery to the next pilot. The aim is not to fill the map, but to make every mark honest enough to use.

## **Decisions Under Change**

Every useful fact begins to age as soon as it is collected. Connections grow older. Ships move. New Signatures may appear. Even waiting for a perfect answer changes the situation in which that answer would be used.

That does not demand permanent suspicion. It demands proportion. A disposable scout taking a reversible step can live with gaps that would be

unacceptable before committing an expensive ship or dividing a Fleet. The observation may be identical; the cost of being wrong is not.

Procedures cannot make that judgment. They can show how to perform an action. They cannot decide how much confidence this ship, this route and this moment require.

## Scope and Limits

*Pathfinder* stays close to the first crossing. It follows the ship through Wormholes, scanning, entry, Bookmarks, maps, navigation, silent Local, Directional Scanner, Polarization, Environmental Effects, common threats and the problem of returning Home.

Where the work becomes doctrine - large-scale rolling, Capital Escalation, Evictions, Corporate Logistics and Industrial Optimization - this volume stops. Later books will take it up. The commitments grow, but the first disciplines do not change: know what was seen, know what was inferred and know which route the plan expects to survive.

This volume cannot make anyone a master of Anoikis. It can make the first steps deliberate and the return something planned rather than merely remembered.

## Beginning the Fieldwork

Turn the page and the transit has already happened. The ship is beside the Wormhole, the system is quiet, and the first decision has not yet been made.





# Part I - Foundations

Every Pathfinder eventually learns the visible work: scanning, naming connections and keeping a map alive. The quieter work comes first. It begins with knowing what the system has actually shown and resisting the urge to finish the picture too early.

Part I stays with that beginning. It follows the first arrival, the nature of Wormhole Space, the connections that make movement possible and the System Types in which they appear. The tools will come. First, the ground beneath them has to be understood.



# Chapter 1 - Welcome to Anoikis

The transit is over before the mind quite catches up. The Wormhole is behind the ship. The client finishes loading the system. The Grid may look empty, and for a moment the familiar windows make the arrival feel almost ordinary.

It is not.

You know that the ship came through this connection. You know the system now shown by the client. You do not yet know whether anyone watched the transit, whether another route is already failing or whether the quiet will last long enough to matter.

Chapter 1 remains inside those first seconds. The task is not to solve the whole system before moving. Leaving the threshold means keeping the difference between what is known, what is suspected and what is still recoverable intact.

## Crossing the Threshold

A Stargate delivers a ship into an established network. A Wormhole delivers it through one observed connection. That connection is limited by time and by the mass carried through it. The fact that it worked a moment ago does not promise that it will remain.

Arrival in Anoikis confirms less than it first appears to. It establishes a ship, a system, a connection and a moment. The rest of the route still has to be found.

The familiar interface makes that change easy to miss. The same icons and windows are still in place. Yet a system name no longer places the ship on a route whose next steps are known. An empty participant list no longer gives the warning a pilot may expect. The nearby Wormhole is not infrastructure. Familiar controls are answering narrower questions now.

The system may hold Celestials, Structures, Signatures, active pilots and other connections. Some will be visible. Some will require Scanning or movement. Some may remain hidden. None should be promoted from possibility to fact merely because the screen is quiet.

The Wormhole behind the ship is different. It carries the first useful piece of route knowledge in the new system: it leads back to the place just left. If that meaning is not preserved, the object may remain visible while the return path has already been lost in practice.

Crossing the threshold creates two directions of work. Read what lies ahead. Protect what allows the crossing to be reversed. Moving before either has been done turns a moment without trouble into an assumption of safety.

## **Read Before Moving**

Do not spend the first quiet moment by reflex.

After the jump, post-jump invulnerability protects the ship until a command is given or the protection expires. At the same time, a ten-second Session Change temporarily prevents some actions, including another jump. The two conditions are separate. One protects the ship; the other limits rapid changes of state.

Together they offer time to look. Not safety, and not certainty - simply a brief chance to read the new Grid before choosing what the ship will do next.

The useful question is not “Is anything here?” It is “What can this position show me, and what could still remain outside the answer?”

Several sources begin answering that question:

- the System Identifier states where the client says the ship is;
- the Grid shows objects that are present and visible nearby;
- the Overview presents objects allowed by its current configuration;
- the Wormhole itself confirms the immediate point of return;

- the Probe Scanner presents detectable signatures and anomalies; and
- the Directional Scanner can report selected objects within its configured search.

Preparation decides how much of that moment is available. An Overview can show everything it was configured to show and still hide a category the pilot needs. A scanner window can be accurate and badly arranged. The danger is not that the interface lies. It is that the pilot forgets the limits of the question it was asked.

Read in the order of consequence. A ship on Grid matters before a distant possibility. The return connection matters before an attractive Site. A timer that limits the next action matters before a label that can be interpreted later.

Keep every answer attached to its Source. “No ships are on my Overview” is useful. It describes one display at one moment. “No ships are in the system” claims more than that display can know. In the other direction, a visible Structure confirms an object, not an active owner. Scanner Probes confirm Probes, not the purpose or allegiance of the pilot who launched them. A ship on Grid confirms presence, not intent. Let each Observation change the picture only as far as it reaches.

## **Silence Proves Nothing**

Local is empty. The sight can feel like an answer because the same window has answered a larger question elsewhere.

In Wormhole Space, pilots do not automatically appear in Local when they enter. They appear after speaking. An empty list therefore describes the conversation, not the population of the system.

That limit belongs in the first arrival picture. A Directional Scanner result with no ships is similarly bounded: the configured scan returned no ship at that moment. Another pilot may be elsewhere or outside what the instrument can show.

Negative observations remain useful when their boundaries travel with them:

- **Observed:** No ship was reported by this scan from this position at this time.
- **Assumed:** The system is empty.

The first can support a decision. The second hides the distance between the instrument and the claim. Chapter 9 returns to that distance when the Pathfinder must build awareness without a roster.

Silence is neither safety nor danger by itself. Keep it in the picture, but do not make it speak.

## Preserve the Return

The easiest route to underestimate is the one already behind the ship.

At arrival, that Wormhole carries something no other object in the system yet has: a confirmed relationship to the place just left. This makes it the first fixed point on the new map, but it is not permanent. Wormholes are comparatively short-lived, and the total mass they can carry is limited. The connection can age while the scout works. Other ships can pass through without being seen. A route available on entry may later weaken or collapse.

Preserving the return is therefore more than dropping a label. The record must carry enough meaning to survive the moment in which it was made:

- the exact location of the connection on this side;
- the system from which it was reached;
- the time at which the relationship was observed;
- the available evidence about its present condition; and
- the fact that the information may become stale.

Memory quickly turns a sequence into a comfortable story: the route was stable, the system was quiet, the exit was obvious. A record keeps

the rough edges that memory removes. It preserves what was known and when. Another pilot inherits that Observation and its age, not the confidence felt by the person who made it.

Later chapters set the conventions for Bookmarks and maps. The principle comes first. A marker without origin, time or meaning may return the ship to an object while failing to explain whether that object is still the route the pilot intends to use.

Before moving away, ask one question: if the next Grid is bad, what lets me reverse this step?

The answer does not guarantee survival. It exposes what the plan depends on. If the answer is only memory, the plan is fragile. If it rests on another pilot's record, the age and origin of that Report belong to the decision.

## **Build a Picture**

The first decision does not need a complete map. It needs a picture honest enough to show where it is thin.

Return to the quiet arrival: a Structure is on the Overview, Local shows no names and the return connection is still on Grid. A careless summary would be short: "Empty system. Abandoned Structure. Safe exit."

A field note built from the same moment looks different:

- the structure is visible now;
- its operational state and current users have not been established;
- Local has disclosed no speakers;
- the presence of other pilots remains Unknown; and
- the return connection was usable at the recorded entry time.

The Structure and the Local window are Observed. The connection between the current and previous systems is Derived from the transit. Anything inherited from a Fleet Member or Shared Map is Reported. The presence of silent pilots remains Unknown.

Those labels can change as the situation changes. When the pilot checks a Report, a fresh Observation joins or replaces it. When new evidence closes an Unknown, it may support a Derived conclusion. A clear Grid can remain a true description of the past while becoming useless for the next decision.

The longer field note feels less certain because it refuses to hide its gaps. That is its strength. It shows what can be acted on, what deserves another look and what the current position cannot answer.

Time belongs in that picture. “The Grid was clear” is unfinished without it. Ships move. Pilots enter and leave. Connections age. A timestamp cannot keep a fact fresh; it shows the next pilot how far freshness has been allowed to fade.

## **First Decisions**

The ship must eventually do something. It can return, hold position, move to gather more information or continue deeper. None of those choices is safe in every system, and none is foolish in every system.

Returning protects one kind of certainty while giving up the chance to learn more. Waiting preserves the present Grid but spends time. Moving can improve the picture while revealing the ship to new Grids and new observers. Going deeper increases the value of the route and the dependence on every connection behind it.

Before acting, bring the choice down to four questions:

1. What do I know now?
2. What am I only assuming?
3. What will this action reveal or expose?
4. What still lets me reverse it?

The ship and the consequence set the amount of confidence required. A reversible step by a disposable scout can carry more Unknowns than a decision that commits a Fleet or a ship that cannot withdraw easily. The scout’s information is not better. The cost of being wrong is smaller.



If a ship appears on the arrival Grid, its presence is immediate; its intent is not. Range, capability, the Session Change, Fleet support and the loss of post-jump protection may all shape the response. The sighting matters, but it does not issue the command.

If the Grid is clear, Local silent and a broad scan reports no obvious activity, the system has offered fewer warnings - not proof of safety. A low-value scout may continue. A vulnerable or expensive ship may need a stronger return plan. The same view can support different actions because the consequences are different.

This way of thinking should become faster with practice, not slower. The aim is not to hold the ship motionless while every uncertainty is discussed. It is to prevent speed from erasing the question the next action depends on.

Then the cycle begins again. Movement changes scan geometry. Speaking in Local changes what the channel reveals. Warping changes the Grid. Passing through a Wormhole spends time and contributes mass. Every action produces the first observation of the next decision.

## **Field Principle**

The first task in Anoikis is not movement. It is knowing what has been shown, what remains Unknown and what must stay recoverable.

Certainty is not required. Honesty is. An empty Local window must remain an empty Local window, not an empty system. A quiet Grid must remain one quiet Grid. A visible return must remain a temporary connection whose future has not been promised.

That is the welcome Anoikis offers. Geography becomes something pilots keep alive together. Silence becomes an answer with edges. The way Home becomes a condition to protect.

The next chapter looks beyond the arrival Grid and into the geography that makes all of this necessary.



# Chapter 2 - The Nature of Wormhole Space

The Wormhole falls behind as the ship warps. A planet replaces it on the screen, then a moon, a Structure or the empty distance between Celestials. The system begins to look less like an arrival and more like a place.

That impression is correct. The ship has not entered a temporary room created for one visitor, nor is it travelling inside the Wormhole itself. It has arrived in another solar system: a shared location that can be crossed, occupied, remembered and revisited. Other pilots may already know it well.

What changes is not the reality of the place. What changes is the way the place can be reached.

Known Space builds the route into the landscape. Stargates remain at their posts, system follows system and the Autopilot can calculate a path through the network. In Wormhole Space, the systems remain while the doors between them move. A connection that defines the present route may be gone before the next operation. Another may open the same system toward a part of New Eden that was nowhere near yesterday's Chain.

This is the nature of Wormhole Space: stable places behind unstable access. Understanding that contrast turns an apparently empty collection of systems into an environment that can be read.

## Space, Not Passage

The words *Wormhole* and *Wormhole Space* are easy to let blur together. In the field they describe different things.

A Wormhole is a connection. It relates two locations for as long as that connection remains available. It can be approached, observed, crossed and recorded. Its condition matters because every plan using it depends on that particular door.

Wormhole Space is the collection of solar systems reached through such doors. The transit does not suspend the ship between two ends of a tunnel. It finishes in a system with its own star, planets, moons, Sites, Signatures and history. The Wormhole used to enter is one object within that system, not the system itself.

The distinction becomes clearest when a connection disappears. The system on the far side is not destroyed. Its Celestials do not vanish with the route, and pilots already there do not cease to occupy the same shared space. Only that way of reaching them has ended.

This separates two questions that are often treated as one:

- What is true of this system?
- What is true of my present connection to it?

A Structure may remain where it was while access to the system changes completely. A Site may still exist after the route by which it was discovered has collapsed. A pilot may know the system and still have no current route to it. Confusing place with passage makes old knowledge look more useful than it is.

## **Persistent, Not Fixed**

Wormhole Space is persistent. It is not fixed.

Persistence means the destination is part of the shared universe. A pilot who returns to the same System Identifier has returned to the same solar system, not to a fresh copy made for a new visit. Celestials retain their relationship to that place. Player activity can leave infrastructure, wrecks, records and expectations behind. Familiarity can make a system feel like home.

Fixed would mean that access to it can be taken for granted. That is the part Anoikis refuses.

The route visible on a Shared Map is a temporary arrangement of persistent places. Its lines show which doors were available when the Chain was observed. They do not turn those doors into permanent roads. If one line disappears, the systems at either end continue, but the operation must live with a different shape.

Residents and travellers can therefore see the same system differently. A resident may know the Celestials, common warp paths and Structures from long experience. A traveller may know only the Entry and the next Signature. The resident has deeper knowledge of the place. Neither pilot receives a permanent claim on the route.

Familiarity therefore runs on two clocks. Knowledge of the system may remain useful for a long time. Knowledge of the current access may decay in hours or minutes. A good record makes clear which clock it is carrying.

## **No Gate Network**

There are no Stargates forming a permanent network between ordinary Wormhole Space systems. The absence matters most when the pilot asks the interface for a route.

Setting a destination in Known Space lets the Autopilot work over an established network. The route may be long or dangerous, but the system can name the planned sequence of gates. A pilot can share a destination and expect another client to calculate from the same network.

Anoikis provides no equivalent route Home. The System Identifier is an address, not a set of directions. The Autopilot cannot reconstruct the connections the scout crossed, cannot know which scanned Signature became which Bookmark and cannot preserve the meaning of a Shared Map.

The missing network shifts responsibility from infrastructure to observation. If nobody records the Entry, the client will not rebuild the path out of kindness. If a connection is misidentified, the error becomes part of every route that relies on it. If the Chain changes, the old route does not become a slightly inaccurate road. It becomes a record of doors that may no longer exist.

This does not make navigation arbitrary. It makes navigation local. Each line must be discovered from one system, connected to observations on the other side and kept only as confidently as its evidence allows.

## Uncharted, Not Empty

Wormhole Space is often called uncharted. A first arrival can make that word look like *untouched*.

That conclusion does not follow.

Uncharted describes the absence of a permanent public route network. It says nothing about who has crossed the system, who may be living there or what has been built beyond the current Grid. A Structure on the Overview is an obvious correction to the fantasy of an untouched frontier. So are wrecks, Scanner Probes and practiced responses from pilots who know the Grid better than the visitor does.

Even a system with no visible player infrastructure is not a blank stage. Wormhole Space can contain Sites occupied by Sleepers. Signatures and Anomalies give the system its own opportunities and threats. Their presence does not identify the other pilots nearby, and their absence from one display does not prove that the place has no history.

The useful reading is narrower:

- **Uncharted:** no permanent gate route describes how to reach this system now.
- **Empty:** no one is present or using it.

The first may be a sound description of Wormhole Space. The second is a claim that requires evidence the arriving pilot rarely possesses.

This distinction changes behaviour without requiring fear. A Pathfinder does not need to imagine an ambush behind every moon. The pilot needs only to stop treating a missing chart as proof that nobody else has drawn one.

## The Living Chain

As soon as two connections are recorded, a Chain begins to appear. The term is simple, but the object it describes is more than a list of systems.

A Chain is the present shape of access known to a pilot or group. It may branch into several Wormhole Space systems, return toward Known Space in more than one place or end at Signatures that have not yet been resolved. Each line rests on an observed transit or another record. Each open end is work not yet done.

The Chain is alive because its meaning changes while it is being used. A connection ages. Traffic passes through it. Another scout adds a branch. A Reported line is checked and becomes supported by a fresh Observation. A door disappears, leaving the systems on the map but removing the route between them.

To a Pathfinder, that movement creates three versions of the same Chain:

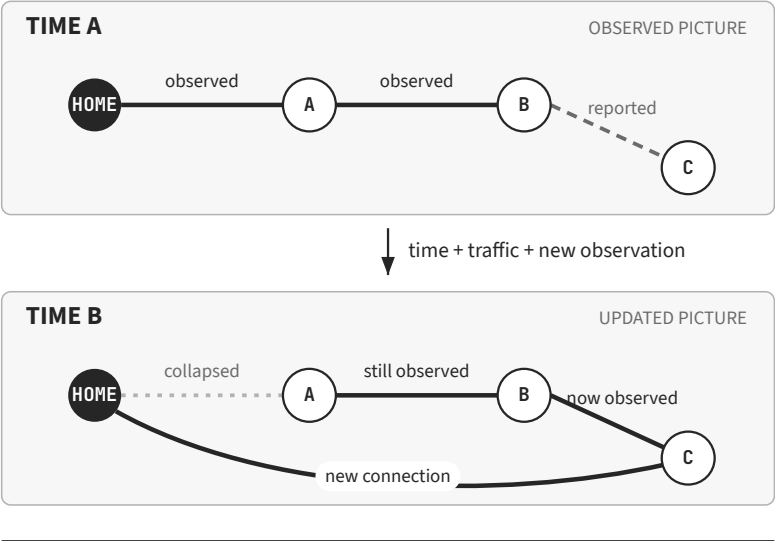
- the Chain that exists in space;
- the Chain the group has observed; and
- the Chain the Shared Map currently represents.

Those versions are never guaranteed to match perfectly. Space may have changed since the last scan. A pilot may have crossed a connection without reporting it. The map may preserve a branch that has already died. Good mapping narrows the distance between the three; it cannot abolish time.

This is also why a Chain has no natural centre. The system called Home may be the centre of an operation, but the connections do not share that preference. From another pilot's Entry, the same map has a different beginning. From a new Known Space exit, a remote branch can suddenly become the shortest way out.

The map is therefore best read as a set of current dependencies. To reach the third system, the plan depends on the first two connections. To return from it, the plan depends on those doors remaining usable or on the ability to find a different route. The shape matters because every additional line can create an option, a burden or both.

**THE SAME PLACES · A DIFFERENT CHAIN**



SYSTEMS PERSIST · CONNECTIONS AGE, APPEAR AND DISAPPEAR

**Figure AFH-B1-FIG-002 — Systems persist while the Chain changes.** The same places remain at Time A and Time B, while a connection collapses, a Reported branch becomes Observed and a new route appears.



## Near and Far

Distance in Anoikis is not measured only in jumps.

A system one connection from Home may be operationally far away if that connection is old, poorly recorded or already under pressure. A system several connections deep may feel closer when every Entry is current, the route has been checked and alternatives are visible. The number of jumps is real. It is simply not the whole cost of return.

Known Space can also become unexpectedly near. A short Chain may open between regions that the Stargate network places far apart. For as long as the route survives, geography has folded. When it closes, the old distance returns.

For a Pathfinder, distance therefore carries another question. Ask not only, *How many connections away?* Ask also:

- How many of those connections have been observed recently?
- How many have no recorded alternative?
- How much of the route depends on someone else's Report?
- What must remain usable for the next action to be reversed?

These questions do not create a number for the map. They reveal the weight hidden inside a short route.

## Home Is Conditional

In a Stargate network, Home is primarily a destination. In Anoikis, Home is also a condition.

The familiar system may persist, but reaching it still depends on temporary doors. On the map, a pilot can appear close to Home and be operationally separated from it. Losing one connection can turn a routine return into fresh exploration without moving the destination.

That is why *another exit* is not the same as *the route Home*. An exit to Known Space may save the ship while leaving it many Stargate jumps from the intended destination. A new path through Wormhole Space

may rejoin the original Chain, but until it is observed, it is a possibility rather than a plan.

Treating Home as conditional changes the purpose of every record. A Bookmark does not merely save a location. Likewise, displaying progress is not all a Shared Map does. A Timestamp does not merely satisfy procedure. Together they preserve the conditions under which the group believes return is still possible.

The condition can fail. When it does, the right response begins with the same discipline as the first arrival: preserve what is known, identify what changed and work outward from the routes that still exist. Panic imagines the whole of Anoikis closing at once. Observation asks which door was actually lost.

## **Field Principle**

Wormhole Space is stable enough to inhabit and unstable enough that every route remains work.

The systems persist. The connections do not promise to. Uncharted does not mean empty, close does not always mean reachable and a familiar Home still depends on temporary doors.

# Chapter 3 - Understanding

## Wormholes

The Pathfinder returns to the Wormhole and opens its information window. The connection has not moved. Nothing on the Grid announces a crisis. Yet the door is already less certain than it was when the ship first arrived.

Time has passed. Other ships may have crossed. The Wormhole may still accept the next transit, or the next transit may be the one that ends it. Its calm appearance does not reveal which possibility is nearer.

The window does not remove that uncertainty. It gives the pilot something more useful: a small set of limits around it.

There is a clue about the kind of space on the far side. There is a statement about how long the connection can still be relied upon. There is an indication of how much of its ability to carry mass remains. Together, these do not predict the future. They describe the operating envelope of the present door.

That distinction matters. A prediction asks, *Will it survive my plan?* The Wormhole Information window cannot make that promise. An operating envelope asks, *What does the connection still permit me to believe?* That question can be answered well enough to shape a decision.

Understanding a Wormhole begins there: not with memorising every type, but with learning what the door reports, what it withholds and how quickly an accurate observation becomes old.

### Read the Door

A Pathfinder reads a Wormhole before treating it as a route.

The information is compact, but it answers several different questions. They should not be allowed to collapse into a single impression of

*good* or *bad*. A connection may point toward useful space and still be too uncertain for a long operation. It may have a comfortable Reliable Lifetime while its mass condition is already poor. It may look suitable for a scout and be unusable by the ship expected to follow.

Read the door in parts:

- What kind of destination does the information suggest?
- What does Reliable Lifetime say now?
- What does the mass indication say now?
- Can the intended ship pass through at all?
- Which parts are Observations, and which came from a Report?

The repeated word is *now*. The window describes the Wormhole at the moment it is inspected. The result may survive in a Shared Map, but the map cannot preserve the condition itself. Time continues. Traffic continues. The record and the door begin to separate as soon as the observation is made.

A Pathfinder therefore does not merely copy a message. The pilot reads it in relation to an action. A scout crossing once, a Fleet moving through in both directions and a ship waiting for a later return do not ask the same thing of the connection. The words in the window may be identical; the consequences of being wrong are not.

## **Rough, Not Exact**

The Wormhole Information window provides rough data. That is not a flaw in the instrument. The boundary lies in what the client is offering. Its destination clue describes the nature of the system beyond the door, not an exact Solar System name. Its lifetime and mass entries describe condition, not a hidden counter made visible. The pilot receives categories and warnings, not a timetable and a ledger.

That leaves a dangerous temptation: to turn a qualitative message into a number it never contained. A fresh-looking statement becomes an assumed number of hours. A stable mass statement becomes an assumed

number of ships. A recent Report becomes a present fact. Each conversion makes planning feel cleaner by removing uncertainty on paper. None makes the Wormhole more certain in space.

The disciplined reading is narrower. Record the words that were actually shown. Record when and where they were observed. If a decision depends on more than those words support, gather a new Observation or reduce the commitment.

An approximate instrument can still support precise behaviour. It simply requires precision about the limits of the evidence.

## **Type Sets Limits**

Wormholes are not interchangeable doors. Their type matters because the limits are not the same for every connection.

The maximum mass permitted in one jump varies by Wormhole type. So does the higher total mass the connection can carry before collapsing. A type is therefore not decorative nomenclature. It is part of the rule set under which that connection exists.

For the Pathfinder, the first lesson is not to memorise a catalogue. The pilot must stop borrowing expectations from the last door. A ship that crossed one Wormhole has not proved that it can cross the next. A connection that endured one operation has not established the capacity of another. Familiarity with the phenomenon does not make its limits universal.

Later chapters will separate destination Classes, System Types and Environmental Effects. Here, the important habit is simpler: identify the particular door, read its current condition and attach every conclusion to that connection.

## Destination Clues

Before transit, the information window offers the nature of the system to which the Wormhole connects. It narrows the Unknown; it does not name the far side.

That difference is operationally useful. A category can tell a Pathfinder whether a door belongs in the present search, whether a Fleet should wait and whether the next observation is worth the exposure of a crossing. It can also prevent a bad assumption: two Wormholes that suggest the same kind of space do not therefore lead to the same Solar System.

The far side becomes an observed place only after someone reaches it and records what is there. Until then, the destination remains a clue attached to the near-side connection.

This preserves a clean line between inference and observation:

- the information window supports a statement about the destination's nature;
- a transit supports a statement about the destination actually reached;
- a current Shared Map supports a route only as far as its Observations remain trustworthy.

The clue is valuable because it reduces blind movement. It is limited because it does not perform the movement for the pilot.

## Reliable Lifetime

The current Wormhole Information window uses the label **Reliable Lifetime**. The word *reliable* carries the meaning that an older, simpler lifetime label did not make clear enough.

The entry is not a countdown to an exact moment of collapse. Its messages are anchored to the earliest time at which the Wormhole could close, while the actual lifespan contains variance. The field question is therefore not *When will it die?* It is *For how long does the client still describe this door as reliably available?*

Once that guaranteed lifespan has ended, the information window can show the state `Expired`. At that point the Wormhole could close at any moment. `Expired` does not mean that the connection is already gone; a visible Wormhole is still present. Nor does presence restore a dependable return window. It means the pilot is looking at a door that has outlived the period the client was willing to guarantee.

That is a subtle but important condition. A Pathfinder may still be able to cross an `Expired` Wormhole. The relevant question is what the plan asks the door to do afterward. A one-way escape, an immediate look and a delayed Fleet return place very different demands on the same surviving connection.

Time also continues between observation and use. A lifetime message copied to the Shared Map is not renewed by being read there. The Timestamp belongs to the Observation, not to the Wormhole. If the route matters, inspect it again.

This is the proper use of `Reliable Lifetime`: not as permission, but as a boundary on confidence.

## Two Mass Limits

Mass constrains a Wormhole in two different ways. Confusing them can make an open connection look usable when it is not.

The first limit applies to a single jump. A Wormhole permits only a limited amount of mass to transit during that jump. If the intended ship exceeds that limit, the connection can remain open and still refuse that ship. This is an admission limit: *Can this transit pass through the door?*

The second limit belongs to the connection as a whole. A Wormhole can carry a higher total amount of mass across all transits. When that total limit is reached, the Wormhole collapses. This is a capacity limit: *How much use can the door sustain before it ends?*

The limits answer different questions:

- maximum jumpable mass concerns one attempted transit;
- total mass concerns the accumulated use of the connection.

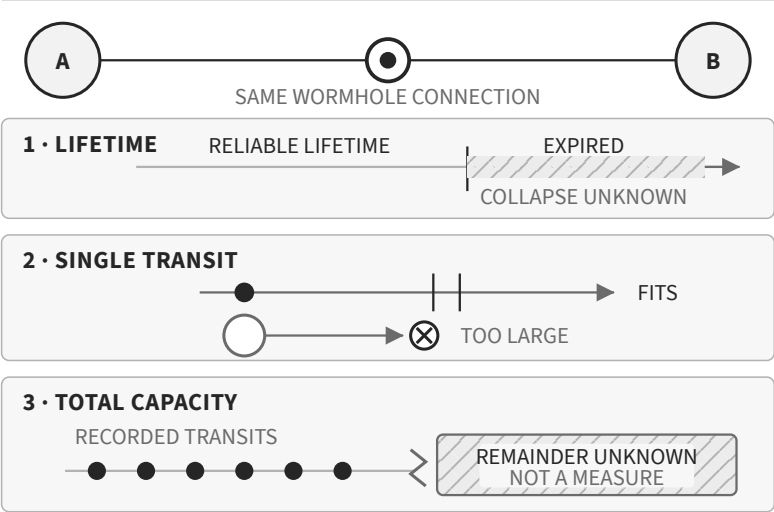
A small ship may fit through the first limit and still be the final transit before the second is exhausted. A larger ship may be below the remaining total capacity and still exceed what the Wormhole permits in one jump. Open is not a complete description of usable.

The information window does not expose an exact running total. It reports a rough mass condition. That condition is evidence about remaining capacity, not a manifest of every ship that crossed. Unobserved traffic matters because it changes the connection without changing the Pathfinder's record.

Mass planning and mass control therefore become specialised work. Rolling a connection deliberately requires numbers, ship states, direction and coordination that belong to later doctrine. The Pathfinder needs the foundation first: there are two limits, every transit interacts with them, and the client does not promise an exact remainder.



**ONE CONNECTION · THREE INDEPENDENT LIMITS**



**Figure AFH-B1-FIG-003 — One Connection, three limits.** Reliable Lifetime bounds time, maximum jumpable mass governs one transit, and total mass governs accumulated use. None of the three can substitute for the others.

## Every Transit Counts

Crossing a Wormhole is not passive observation. It changes the object being observed.

The ship that goes through contributes mass to the connection's used total. The time spent scouting, waiting or forming a Fleet advances its age. A second crossing is therefore not made through exactly the same operational condition as the first, even when the information window still uses the same words.

This creates a useful reversal of ordinary travel. In a Stargate network, using a gate does not ordinarily spend the route. At a Wormhole, movement is part of the route's history. Reconnaissance, transport, rescue and return all draw on the same temporary connection.

The Pathfinder should therefore see traffic as both movement and information. A known transit confirms that the door accepted a particular ship at a particular time. It also means more mass has passed, and more time has elapsed. An unknown transit provides no report at all while still changing the condition.

No single crossing needs to be treated as a crisis. The habit is simply to stop imagining the door as untouched between checks. Observation and use are entangled. The act that answers one question may weaken the condition on which the return depends.

## Record the State

A useful Wormhole record preserves enough context for another pilot to judge its age and limits. The record makes no claim to preserve the Wormhole itself.

At minimum, the record should connect four things:

- the particular connection and the side from which it was observed;
- the destination clue reported by the information window;
- the exact `Reliable Lifetime` and mass wording observed; and
- the `Timestamp` of that Observation.

If the information came from another pilot, keep the Source visible. An accurate Report can be operationally valuable, but it is still a Report until someone verifies it. If the condition is checked again, add the new Observation rather than silently moving the old `Timestamp` forward.

The distinction protects the group from a common failure. A map entry can look current because someone edited it recently even though the Wormhole condition inside it was observed much earlier. Recording the observation time keeps the age attached to the evidence, where it belongs.

The same discipline applies when the state worsens. Do not soften the wording to preserve an attractive route. If `Reliable Lifetime` now reads `Expired`, record `Expired`. If the mass indication has changed,

replace expectation with the new Observation. The Shared Map is useful only while it is allowed to disappoint the plan.

Good records do not eliminate rechecking. They tell the next pilot what needs to be rechecked first.

## **Field Principle**

A Wormhole is a door with limits, not a promise with a destination.

Its information window gives rough but useful evidence: a clue about the far side, a boundary on reliable time and a condition for remaining mass. Its type shapes the limits. Every transit uses the connection, and every minute ages the Observation.

Read what is shown. Preserve when it was shown. Never make the door guarantee more than the client has said.



# Chapter 4 - Classes and System Types

The new system is already on the Shared Map. Beside its identifier sits a short label: C3.

For a moment, the label seems to explain the place. It is compact, familiar and easy to repeat on comms. A Fleet can form around it. A route can be named after it. A pilot who has never seen the system can believe that two characters have turned the Unknown into something understood.

The label is useful. It is not the whole system.

C3 describes one layer of the environment. Nothing in that label says whether the system is Shattered, whether an Environmental Effect is present, whether the current connection will admit the intended ship or whether another pilot is watching the Entry. A Class narrows expectation without completing the picture.

Anoikis becomes easier to reason about when its labels are kept in layers. A Pathfinder can then say what belongs to the system, what belongs to a special System Type, what belongs to an Effect and what belongs only to the temporary door used to arrive.

The purpose of classification is not to make every system predictable. It is to make different kinds of uncertainty visible.

## Read the System

Chapter 3 read the Wormhole as a door. This chapter reads the place behind it. The two must remain separate.

The connection carries its own Type, `Reliable Lifetime`, maximum jumpable mass and total mass condition. The destination carries a System Identifier, a Class or special System Type and, in some systems, an

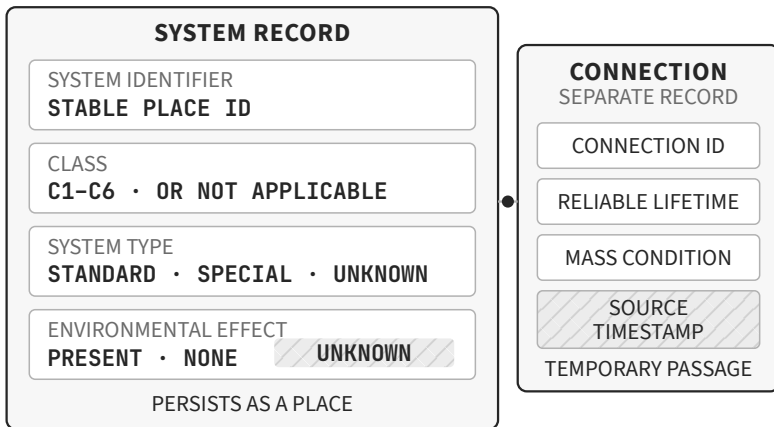
**Environmental Effect.** The connection may collapse while the destination remains. The destination may be familiar while the new connection to it is not.

Begin with five questions:

- What is the System Identifier?
- Is the system one of the common Classes C1-C6?
- Does a special System Type apply?
- Is an Environmental Effect present?
- Which of these labels are Observed, Derived or merely Reported?

These questions do not all need an immediate answer before a scout can move. They prevent one answer from quietly standing in for the others. Knowing the Class does not verify the Effect. Recognising Thera does not evaluate the arrival Grid. Reading the destination does not update the condition of the Wormhole behind the ship.

The system is understood by accumulation. Each layer changes a different part of the decision.

**ONE SYSTEM · FOUR LAYERS · CONNECTION SEPARATE**

CLASS ≠ TYPE · TYPE ≠ EFFECT · NONE DESCRIBE CONNECTION STATE

**Figure AFH-B1-FIG-004 — Read a system in separate layers.** The System Identifier anchors the place; Class, System Type and Environmental Effect qualify different aspects of it. A Wormhole Connection remains a temporary object with its own state, Source and Timestamp.

## The Six Classes

The common Wormhole Space systems are organised into six Classes, C1 through C6. Official guidance describes them as Classes of increasing difficulty. That progression gives a Pathfinder a broad order for the PvE environment and the demands that its content may place on a pilot or Fleet.

Broad is the important word.

A Class is not a complete encounter specification. The label does not identify the Site on the next Grid, provide a fitting, promise a reward or measure the pilots already present. C1 is not a synonym for safe, and C6 is not proof that every immediate action is fatal. The Class describes

the system's general content band. The present threat still has to be observed.

This distinction protects both new and experienced pilots. A new Pathfinder should not treat the lower end of the sequence as training space with no consequences. An experienced pilot should not allow a familiar Class to erase the differences between two systems, two routes or two moments in the same system.

Use C1-C6 to set the first scale of expectation:

- What level of preparation may the environment deserve?
- Does the intended operation belong in this general band?
- Which assumptions need verification before another ship follows?

The Class prepares the next question. Its answer still requires observation.

## **Class Is Context**

Behind the short labels is a controlled data classification. In the current Static Data Export, a `wormholeClassID` can be assigned to a Solar System, a Constellation or a Region. When a system has no value of its own, the value can be inherited from the larger structure that contains it.

For the pilot, the implementation detail carries a practical lesson: a Class label in a mapping tool is usually Derived information. It may be reliable and repeatable without being something the scout directly observed on the arrival Grid. Its Source is game data, a controlled reference or a tool built from either.

Derived does not mean weak. It means the reasoning remains visible.

The same data field also contains identifiers for kinds of space outside the common C1-C6 sequence, including Known Space categories and Pochven. Official developer guidance therefore warns that the field alone is not suitable for deciding whether a system is Wormhole Space. Context still matters, even in a classification built to provide context.



Most pilots never need to read the SDE. They do need to know what a map label can and cannot prove. A tool may identify the Class correctly while the map's route, occupants and connection states remain old.

## Beyond C1-C6

Not every important system in Anoikis fits inside the common six-Class sequence.

Current official data reserves distinct System Types for:

- Thera;
- special small-ship Shattered Wormhole Systems; and
- five kinds of Drifter Wormhole Systems.

These categories are not C7, C8 and C9. They do not continue the difficulty ladder. They distinguish places whose structure or access differs enough that forcing them into the ordinary sequence would hide the feature that matters.

This changes how a Pathfinder reads shorthand. *Special* does not necessarily mean *more difficult*, and a higher internal identifier does not mean a higher Class. A special System Type is a branch in the classification, not another rung above C6.

When a map gives one of these labels, read the label as a request for a different set of questions. What is special about the system? Which ordinary C-Class expectations no longer apply? Which facts must be checked from a current Source before the route is used?

## Shattered Systems

Shattered is not one simple Class.

Standard Shattered Wormhole Systems were distributed across the existing C1-C6 Classes. Their planets are shattered, and they have no moons, but they still carry Class-appropriate Wormhole Space content. A system can therefore be both C2 and Shattered, or both C5 and Shattered. One label does not cancel the other.

This makes Shattered a useful test of layered reading:

- the C-Class describes the common content band;
- Shattered describes a different physical and operational System Type;
- an Environmental Effect, if present, remains another layer; and
- every current Wormhole connection keeps its own limits.

The special small-ship Shattered Systems are different again. Current official classification gives them a kind of their own rather than placing them in the ordinary C1-C6 sequence. Their access restrictions are the defining warning. A Pathfinder should verify the current Wormhole and intended hull instead of borrowing permission from a standard Shattered system.

The word *Shattered* therefore starts an inquiry. The inquiry remains open.

## **Thera Stands Apart**

Thera is Shattered, but treating it as only another Shattered system would discard the part that makes it Thera.

Official data assigns Thera its own System Type. It is not classified as C3 or C4, even though its original design includes Wormhole content associated with those Classes. The distinction prevents content expectations from being mistaken for the identity of the system.

Thera was designed around NPC stations, exceptional scale and many Wormhole connections. That combination makes it behave less like an ordinary point in a C-Class Chain and more like a changing junction used by many unrelated travellers.

The operational consequence is not a list of special rules to memorise. It is a change of posture. A connection into Thera should raise questions about traffic, route age, station activity and the number of ways other pilots may arrive. The name identifies the place without making it controlled.

Thera demonstrates why System Type and Class cannot be treated as synonyms. A system can borrow content from a Class without belonging to that Class.

## **Drifter Categories**

The official classification also separates five kinds of Drifter Wormhole Systems: Sentinel, Barbican, Vidette, Conflux and Redoubt.

These are System Type labels, not additional steps beyond C6. Their existence signals that ordinary C-Class expectations are incomplete. A Pathfinder who encounters one has entered specialised space and should resist filling the gaps with habits learned in a common C-Class system.

The distinction between Type and proper name matters here. The current SDE can give a Drifter system a present name that is not identical to the Type label used by the classification table. Record the current System Identifier and name separately from the category. If one changes, the other must not be silently rewritten to match it.

This volume does not turn Drifter Systems into a beginner route. It gives the reader enough structure to recognise that the common six-Class model has ended. Recognition is the safe first result.

## **Effects Stay Separate**

An Environmental Effect is not a Class and not a System Type.

Official data currently distinguishes six Effect types: Magnetar, Black Hole, Red Giant, Pulsar, Wolf-Rayet and Cataclysmic Variable. The same Effect type can occur across Wormhole Classes. Its presence adds another set of consequences for the system; it does not replace the underlying Class.

A C-Class label therefore cannot answer the Effect question. Nor should an Effect name be used as shorthand for the whole system. A Pulsar describes the environmental modifier. The Effect name reports neither

the Wormhole's mass, the Chain's freshness or the pilots on the Directional Scanner.

Chapter 12 will examine what the Effects do. The Pathfinder's task here is to keep the field open in the mental model:

*Class known. System Type checked. Effect still Unknown.*

That sentence is more useful than allowing the Class to imply an answer that was never observed or derived.

## Not a Verdict

Classification reduces uncertainty by naming the kind of place. It cannot judge the present moment.

No Class or System Type reveals who is present, whether a Structure is active, whether the arrival Grid is watched, how old the Shared Map is, whether the return connection is healthy or what will follow the next command.

These current-state questions belong to Observation, Scanning, mapping discipline and the condition of each Wormhole. The Class may change the weight of evidence; it cannot supply evidence that was never gathered.

A lower Class cannot authorise carelessness, nor a special System Type panic. The label supplies context; the decision still needs a present picture.

## Record the Layers

A Shared Map should make the layers easy to separate at a glance.

For each system, preserve:

- the System Identifier and current proper name, if one exists;
- the C-Class or special System Type;
- the Environmental Effect, or an honest Unknown;
- the Source and Timestamp of every changeable Observation; and

- each Wormhole connection as a separate object with its own state.

Stable classification data does not require the same Timestamp discipline as a Directional Scanner result, but it still needs a Source. A tool may update. A system name may change. A Report may use an old category. The record should reveal whether the label came from current data, a fresh Observation or another pilot's map.

Do not compress the layers merely to make the map look clean. C4, Shattered, an Effect and an ageing return connection are four different facts. If they become one colour or one vague tag, the next pilot cannot tell which part needs rechecking.

Good shorthand preserves distinctions. It makes the important sentence short without making it false.

## **Field Principle**

A Class tells the Pathfinder what kind of environment may be ahead. A System Type tells which ordinary expectations may fail. An Environmental Effect adds another condition. None of them reports the pilots who are present or the health of the door behind the ship.

Name the system in layers. Decide from the whole picture.



## Part II - Exploration

The first part taught the Pathfinder to separate a place from the door that reaches it, a Class from the moment inside it and an Observation from the claim built upon it. Exploration begins when those distinctions are put to work.

The next four chapters follow information as it becomes a route. A hidden location must first be measured. The ship must then cross the connection it has found. The Pathfinder must preserve positions that the client will not preserve for the group, and those positions must become a map that can survive change.

Each step creates knowledge and dependence together. A stronger scan makes a location clearer. A Bookmark makes it recoverable. A Shared Map lets another pilot act upon it. None of them makes the system still.





# Chapter 5 - Scanning

## Fundamentals

The Probe Scanner is already open. One result is complete. Several others are little more than identifiers and coloured indications. In the Solar System map, the probes form a pattern around a point that may or may not be the point the Pathfinder needs.

The window appears to offer a list of places. At first, it does not.

It offers a mixture of located sites, unresolved signals, probe positions, filters and the record of the latest measurement. Some entries can be used at once. Others are evidence that something can be found without yet providing a place to which the ship can warp.

That distinction is the foundation of Scanning. The Pathfinder is not asking the client to name everything hidden in the system. The Pathfinder is using a measurement to reduce an area of uncertainty until a useful location remains.

The mechanics reward precise manipulation. The habit behind them is more important: never ask a scan result to be more complete than the pass that produced it.

### A Different Picture

Scanning changes the Pathfinder's relationship with the system. The Overview and the Grid begin with what the ship can presently display around itself. The Probe Scanner begins with possibilities distributed across the wider Solar System.

The Sensor Overlay can offer an overview of exploration sites and a general direction. The second window adds a working surface on which probes and results can be examined. Neither window turns every indication into a resolved destination merely by displaying it.

This matters because visual presence is persuasive. A marker on a map feels more like a place than a sentence saying *something may be there*. Yet the marker may still represent an area, an estimate or a result that is not warpable.

Read the interface as a statement of resolution. It shows what kind of answer the client can support at this stage of the search.

A completed result answers *where can I act?* An unresolved result answers a different question: *where should the next measurement be concentrated?*

Confusing those questions makes the scan feel unreliable. Separating them reveals that the result is doing exactly what it should: changing shape as the available evidence improves.

## Two Result Types

Its result list presents two kinds of exploration result that must not be treated as interchangeable:

- Cosmic Anomalies are already located. They do not require probes and can be selected as warp destinations without probe assistance.
- Cosmic Signatures indicate hidden sites. They require Core Scanner Probes to locate before the ship can warp to them.

A Cosmic Anomaly therefore begins as an available destination. Its appearance at full signal strength does not mean the site is safe, empty or worth running. It means the location problem has already been solved by the client.

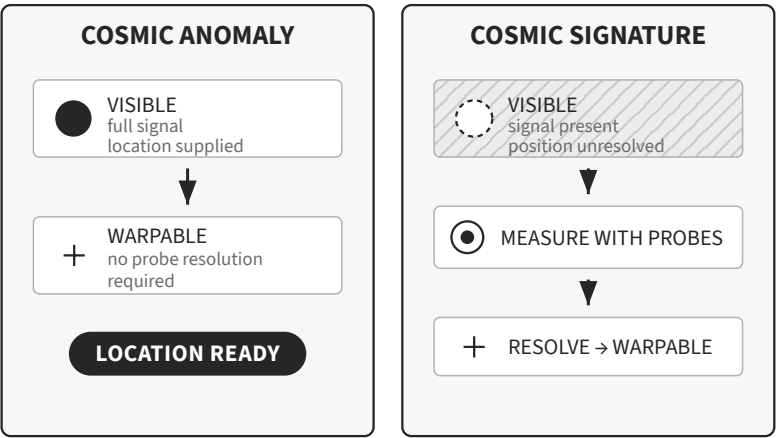
A Cosmic Signature begins with a different promise. Something is present to be resolved, but the first indication does not yet supply a destination. The Pathfinder must build that location through probe measurements.

The difference is about access to a position, not the value of the site. A warpable Anomaly may be irrelevant to the operation. An unresolved

Signature may be the next Wormhole in the Chain. Resolution and importance are separate judgements.

The result list becomes easier to read when each entry is given the right question. For an Anomaly: *Do I have a reason to use this known location?* For a Signature: *Do I have a reason to spend attention resolving it?*

**TWO RESULT TYPES · TWO STARTING POINTS**



RESOLUTION DESCRIBES LOCATION · NOT VALUE OR SAFETY

**Figure AFH-B1-FIG-005 — Anomalies and Signatures begin at different stages.** A Cosmic Anomaly already supplies a warpable location. A Cosmic Signature is visible but must be resolved with Core Scanner Probes before it becomes warpable.

## Visible, Not Located

A visible Signature is not a contradiction. Visibility tells the Pathfinder that the scanning system has exposed a signal. Location asks whether the client has narrowed that signal to a usable point.

Between those states lies the work of Scanning. Early results carry less positional certainty. Later results can identify more about the Signature and place it more precisely. Only the resolved result supports a direct warp.

Signal progress is therefore not a probability that the site exists. The Signature already supplies the reason to search. Progress describes how well the present measurement has resolved it.

Nor is signal progress a measure of distance from the ship. A result can be difficult to resolve because of the relationship among probe placement, scan range, the Signature and the Pathfinder's Scanning capability. The percentage is not a route length.

When the distinction is held, a weak result stops being a disappointment. It becomes a bounded statement: the present measurement has not yet produced a usable location.

## **Each Pass Measures**

Selecting AnaLyze does not uncover a fixed layer of the map. It asks the deployed probes to measure the volumes currently assigned to them.

That means every pass has a context. The probes occupy positions. Their ranges cover parts of the Solar System. Their formation overlaps around some places better than others. The Pathfinder's Scan Strength, Scan Deviation and Scan Duration shape what the pass can return.

The new result belongs to that arrangement. If it improves, the probes have produced a more useful measurement of the Signature. If it becomes worse or fails to progress, the response does not prove that the Signature moved or vanished. It first asks the Pathfinder to inspect the measurement.

Was the indicated area still covered? Did the formation remain centred as the range changed? Was the next step too narrow for the remaining uncertainty? Is the target more difficult than the current Scanning capability can resolve comfortably?

Those questions turn repeated clicking into diagnosis. The Pathfinder stops hoping that another pass will become better by itself and begins changing the conditions that produced the poor result.

Scanning then becomes a conversation with evidence. Place, measure, read, adjust and measure again. Each pass should have a reason.

## Geometry Creates Precision

The Solar System map visualises both probes and Signatures. Moving the probes changes the space being measured. Resizing them changes the scale at which that space is examined.

A broad range is useful when the possible location is broad. It covers more space, but asks a less focused question. A smaller range can support a more precise answer when the remaining uncertainty fits inside it.

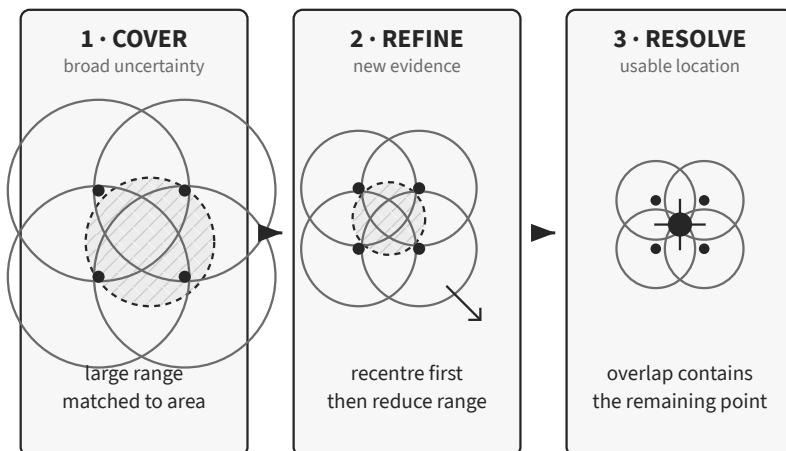
Smaller is not automatically better. A narrow formation placed beside the indicated area asks a precise question about the wrong space. The absence of a good result then belongs to the placement, not necessarily to the Signature.

Overlap gives the pattern meaning. The probes are not independent searchlights whose results can simply be added. Together they form a measurement geometry around the target area. The useful centre is where that geometry and the remaining uncertainty meet.

Range and position therefore remain different actions. Range controls the scale of the question. Position controls where the question is asked. The Pathfinder should be able to explain the next change in one sentence: *The result is here, the uncertainty is this large, and the next formation will measure that space more closely.*

Precision is not produced by shrinking alone. It is produced by matching the geometry to the evidence already obtained.

## PLACE • MEASURE • RECENTRE • REDUCE



SMALLER IS USEFUL ONLY WHEN THE EVIDENCE STILL FITS INSIDE

The sequence is conceptual; it does not reproduce the client interface.

**Figure AFH-B1-FIG-006 — Geometry turns broad uncertainty into a usable point.** Cover the remaining area, recentre on the new evidence and reduce range only while that evidence stays inside the overlapping formation.

## Three Scan Qualities

Three values describe the current Scanning capability:

- Scan Strength supports the ability to resolve difficult results.
- Scan Deviation describes the positional uncertainty that can remain in a result.
- Scan Duration describes how long a measurement takes.

The displayed values include bonuses from Skills, Ships, Modules, Rigs and Implants. They describe the capability brought to the measurement, not the quality of the pilot's present probe placement.

Better equipment cannot make misplaced probes cover the target. Good geometry cannot guarantee that a poorly prepared Scanning platform

will resolve every difficult Signature. The equipment and the arrangement answer different parts of the same problem.

For a Pathfinder, the practical lesson is not to memorise a perfect fitting in this chapter. The pilot must recognise where improvement must occur. A result limited by poor placement calls for a better measurement. A result repeatedly limited despite sound placement may call for more capability, more time or a different pilot.

## **Progress Is Evidence**

The result display makes progress visible. At the final state, a Cosmic Signature is both fully resolved and warpable. Before that point, the changing result records how the search is narrowing.

Treat that progress as evidence, not encouragement. A higher value says that the latest measurement supports a more resolved position. No conclusion follows about whether the site is safer, closer or more valuable.

The distinction matters most when the result begins revealing a Group or more specific information. A label can change the priority of the search. It still does not replace the final location or the observations that must be made after arrival.

The current client can also provide additional information through Probe Scanner tooltips, including known site names. Such information helps the pilot interpret the result, but a partial result remains unwarpable.

A Pathfinder can stop before full resolution when the revealed information is enough to show that the Signature does not serve the present task. That is not a failed scan. It is a search ended by a decision.

The opposite is also true. Reaching a warpable result completes the location problem, not the operational judgement. The next question belongs to entry, observation and risk.

## Filters Change Silence

Filters can hide results and allow Signatures to be ignored. This is useful in a crowded system. It is also another way for the interface to look quieter than the system is.

A filtered result has not disappeared from space. It has disappeared from the current view. An ignored Signature has not been resolved as irrelevant for all pilots and all operations. It has been set aside in this working context.

Filtered results can be restored through Show. The interface therefore distinguishes between *there are no results* and *no results are being shown*.

That distinction should survive in the Pathfinder's thinking. Before reporting an empty Probe Scanner, inspect the filters and ignored results. State the configuration with the Observation when it matters.

*No Cosmic Signatures are shown with this filter* is narrower and more useful than *there is nothing here*. It also tells the next pilot what must be checked before relying on the Report.

Filters reduce noise. They do not reduce the system.

## Probes Are Return

In Known Space, running out of Core Scanner Probes may end an exploration attempt. In Anoikis, it may remove the ordinary means of locating an exit.

An ample probe supply therefore belongs to navigation, not merely inventory management. Probes are part of the Pathfinder's ability to turn an unresolved way out into a usable location.

The client recovers deployed probes automatically when the ship jumps to another system or docks. That convenience should not be mistaken for a promise under every interruption. Downtime does not recover them, and lost probes may only be reconnected while their limited lifetime still permits it.



The `Reconnect to Lost Probes` function can repair some client interruptions. It cannot create probes that are no longer recoverable. Spare probes preserve a capability that recovery tools may fail to restore.

Record this in the same category as fuel, Bookmarks and the health of the return connection: a resource can be present now and still require protection before the route depends on it.

The important question is not whether probes were launched. It is whether the Pathfinder will retain the means to resolve the next connection if the plan changes.

## Record the Search

A useful Scanning record preserves the difference between a possibility and a location. At minimum, keep together:

- the visible Signature identifier or result being worked;
- the latest resolved information shown by the client;
- whether the result is partial or warpable;
- the Timestamp of the measurement; and
- the Source when the result came from another pilot.

Do not promote a partial result in the Shared Map merely because the likely answer seems obvious. Record the degree of resolution honestly. The next pilot may have better Scanning capability, a different purpose or a fresher view of the system.

Once a location is resolved, its continued usefulness depends on what happens next. Chapter 7 will establish Bookmark Discipline. Until then, retain the essential distinction: a result in the Probe Scanner and a position preserved for later use are not the same record.

A scan can be exact enough to warp now and still be poorly preserved for the return. The work is complete only when the information survives the moment in which it was produced.

## Stop With Purpose

Not every Signature must be resolved during every visit. Completeness has a cost in attention and time.

The Pathfinder may be searching for a route, checking whether a reported connection still exists or building a full picture for a later operation. Each purpose requires a different stopping point.

Stopping because the Group is irrelevant can be sound. Ending the attempt because the present capability cannot resolve the Signature can also be sound, if the limit is recorded. Repeated passes that have become habit are not a decision.

Before ending the search, ask:

- What question has the scan answered?
- What remains only indicated?
- What must another pilot repeat or complete?
- What route or decision now depends on this result?

These questions keep an unfinished scan useful. They also prevent a fully resolved position from carrying more authority than it deserves.

Scanning does not finish when the bar turns complete. It finishes when the Pathfinder knows what the result supports and what action should follow.

## Field Principle

A scan result is a measurement of hidden space, not a judgement upon what it contains. Progress describes resolution. Filters describe the present view. The final state supplies a location, not safety.

Place the probes around the evidence. Change one question at a time. Preserve the answer at the level the client actually provided.

# Chapter 6 - Entering Anoikis

The Wormhole has been resolved, warped to and inspected. Its information suggests a destination the Pathfinder is prepared to enter. The connection does not appear close to failure. Nothing on the Grid has yet made the crossing unacceptable.

The next command is short. Its consequences are not.

Entering Anoikis changes which side of the connection holds the ship, which observations remain current and which route the next decision depends upon. The Wormhole may survive the transit, change state under the added mass or collapse after it. The arrival Grid may be quiet, occupied or already prepared for the ship that appears.

No entry procedure can remove those possibilities. Good entry work keeps them separate long enough for the Pathfinder to understand what has changed.

The crossing begins before the jump command. It begins when the pilot decides which Unknowns can travel with the ship and which must be reduced first.

## A Real Commitment

The Wormhole does not offer a view into the destination. Its information can indicate the nature of the other side and the condition of the connection, but the arrival itself remains unobserved until someone crosses.

That makes entry an information boundary. Before transit, the Pathfinder knows the departure Grid, the current side of the Wormhole and the observations collected there. After transit, the client supplies a different system and a different Grid. Some earlier conclusions survive. Others have already begun to age.

The ship also becomes part of the connection's history. Its mass is added to the total carried. The pilot begins a new Session Change. The first transit in a direction becomes relevant to Polarization. Even a small scout has altered the conditions it may need for return.

This is why *I can jump* and *I should enter* are different statements. Capability answers whether the client will accept the transit now. Judgement asks whether the ship, route and purpose can tolerate what the other side may reveal.

A useful entry decision can be expressed plainly:

*The connection supports this ship, its observed state supports this commitment, and the pilot retains a way to continue or recover if the destination is worse than expected.*

If one part of that sentence is only hoped for, the crossing carries more uncertainty than the display suggests.

## **Read Before Crossing**

The last quiet moment on the departure side is the time to gather facts that will otherwise become memory.

Read the Wormhole Information again. The relevant Observation is the state closest to the decision, not the state reported when the Signature was first resolved. Confirm the destination clue, the maximum ship-size indication, the Reliable Lifetime and the mass condition. A report from another pilot may have been correct when written and still be too old for this transit.

Then read the ship. The fitted probe launcher matters only if usable probes are available. A cloak matters only if the pilot understands what action will break protection. A prepared return Bookmark matters only if it names this side of this connection clearly enough to be recognised under pressure.

Finally, read the operation. Is the ship testing a connection, extending a Chain or carrying something the group cannot casually lose? Is another pilot expected to follow? Does the plan depend upon this same Wormhole for return?

None of this inspection creates delay for its own sake. It establishes what the crossing is allowed to risk.

An inexpensive scout may accept an Unknown arrival because the purpose is to observe it. A larger commitment may require a fresher connection state, another route or a scout already waiting beyond the Wormhole. The destination has not changed between those cases. The consequence of a poor answer has.

## Separate Both Sides

One connection has two visible ends. They belong to different systems, occupy different positions and may carry different local identifiers.

The Wormhole seen before entry is not the object that will appear behind the ship after entry. They represent the same connection, but they are not the same saved position. A Bookmark on one side cannot substitute for a Bookmark on the other.

This distinction is easy to lose because language compresses both ends into one phrase: *the hole*. That shorthand is harmless while everyone shares the same context. It becomes dangerous when a label, report or map must tell a pilot where to warp.

Before crossing, the Pathfinder should know how the departure end is recorded. After crossing, the arrival end must receive its own record. The two records can then be related through the Shared Map.

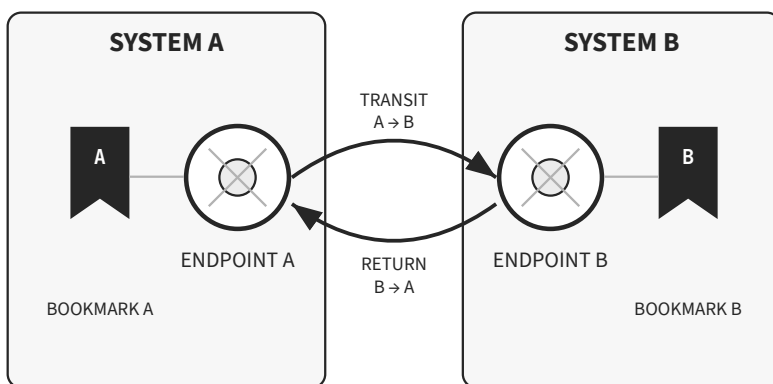
Think of the connection as a door with an address on each face. The doorway is shared. The address is not.

This model also protects later corrections. If a Signature identifier or local Bookmark is wrong on one side, the other side can remain valid. If

the connection collapses, both endpoint records can be retired without deleting the systems they once related.

Keeping the ends separate is not administrative neatness. It is what allows a map to answer the practical question: *Which position in this system leads where I intend to go?*

### ONE CONNECTION · TWO LOCAL POSITIONS



### THE DOORWAY IS SHARED · THE ADDRESS IS NOT

A bookmark on one side cannot locate the endpoint in the other system.

**Figure AFH-B1-FIG-007 — One connection needs two endpoint bookmarks.** Endpoint A and Endpoint B belong to the same connection, but each occupies a different local position and requires its own Bookmark.

## Use the Pause

Chapter 1 introduced the two conditions that follow a transit. Entry turns that knowledge into a decision window without turning the conditions into one mechanic.

The ten-second Session Change restricts another jump and several other actions. Post-jump protection lasts until a ship command ends it or sixty seconds have passed. Session Change limits action; post-jump protection delays exposure.

Let the Grid finish loading. Identify the return Wormhole and the System Identifier. Notice the objects, Effects and warnings that differ from the departure-side picture. The useful question is not *How quickly can I issue the next command?* It is *Which command should end this protection?*

An immediate return, movement, cloaking and Warp all spend the pause differently. Waiting without observing wastes it; acting by reflex discards it. Use the interval to choose without asking the interval to make the choice safe.

## **Read the Arrival**

The departure-side plan carried expectations. The first Grid tests them. Start with difference. Confirm the system actually reached and the return Wormhole now behind the ship. Note visible contacts, deployed objects, wrecks or Effects that alter the immediate picture. Then compare the arrival with the Report or Shared Map that supported entry.

The Overview and Local retain the limits established earlier; arrival does not remove them. Clearing the whole system from one Grid is impossible. Instead, find which expected facts still hold and which new Unknown can change the next command.

Agreement supports the route record. Disagreement is even more useful: it identifies the exact part of the old picture that needs attention. The arrival is not a verdict on the earlier Report. Treat it as a new Observation taken after a state-changing event.

## **Preserve the Exit**

Before the Pathfinder allows the Wormhole to leave the Grid, its arrival-side position must be preserved.

The scan result on the departure side cannot do this. It describes a position in the previous system. Nor should a pilot assume that the client will create a usable record of the entry automatically. The return object now visible behind the ship is the evidence available on this side.

Save that object as a Bookmark while the relationship is unambiguous: *this is the Wormhole through which the ship just arrived*. A polished label can wait if the situation demands attention. The position cannot be reconstructed from memory after the ship has warped away.

The first label should communicate function before detail. It should tell the pilot that this Bookmark leads back along the connection just used. Chapter 7 will develop the naming and sharing discipline. At the threshold, the essential result is simpler:

*The exit is preserved, it is distinguishable from other Wormholes in the system, and its meaning is not stored only in the pilot's memory.*

After saving, verify the record. A window closing is not proof that the Bookmark entered the intended folder, received the intended expiry or is available to the people expected to use it. Under pressure, preservation comes first; confirmation follows as soon as the arrival permits.

A route Home can survive an untidy label for a minute. It cannot survive a missing position.

## **Polarization Begins**

Every Wormhole transit also starts a directional Polarization history for that pilot and that connection.

The current rule prevents a pilot from travelling through the same Wormhole in the same direction twice within five minutes. An initial passage from system A to system B does not prevent an immediate passage back from B to A once the Session Change has ended. That return is the first transit in the opposite direction.

A third passage may be different. If the pilot tries to travel from A to B again before five minutes have passed since the first A-to-B transit, the Wormhole refuses the jump. The B-to-A direction keeps its own history. This matters during first entry because a quick retreat can look like a reset. It is not. The ship may be back where it began while the pilot



has created two different directional timers. A later attempt to escape through the same connection can fail on the side where the pilot expected it to work.

Polarization belongs to the pilot, not to the hull as a general property. It also belongs to this particular Wormhole, not to every connection in the system.

Chapter 11 will examine the mechanic in depth. For entry, retain the part that changes decisions immediately: record the transit time, distinguish the two directions and never assume that returning through a Wormhole erased the first jump.

## **Mass Crosses Too**

The ship does not pass through a neutral doorway. Its transit consumes part of the Wormhole's total mass capacity.

The Information Window gives rough mass-state messages rather than an exact remaining value. Those messages may show that the connection was not yet heavily reduced without revealing how close the next meaningful threshold lies. Other ships may also have crossed since the last observation.

This creates two obligations.

First, never report the pre-entry state as though it were observed after the ship crossed. The transit itself is a reason to consider the earlier record aged. If the connection matters to following ships, observe its state again and Timestamp the update.

Second, count the return as another transit. A decision to enter and come straight back is not one use of the Wormhole. It is two movements of ship mass through the connection.

For a small Pathfinder hull, the individual contribution may seem unimportant. The habit cannot depend on the hull being small. Fleets, industrial traffic and deliberate mass reduction all magnify the same

mechanic. Recording only dramatic transits in the Shared Map teaches the group to forget how the total was accumulated.

The book does not ask the beginner to estimate exact remaining mass from rough messages. It asks for an honest distinction: mass observed before the transit, traffic known since, and present state still Unknown until checked.

## **Decide From Arrival**

Once the exit is preserved and the first picture has formed, entry ends in a decision rather than a ritual.

The Pathfinder can continue the survey, hold position, return, call for help or stop the operation. Each choice should follow from the same five questions:

- What is visible now?
- What expected information still agrees with the arrival?
- Which Unknown could change the next action?
- What route does the ship depend upon?
- What becomes harder to reverse after moving?

Continuing may be reasonable when the Grid is manageable, the return is preserved and the ship retains its Scanning capability. Returning may be reasonable when the Wormhole state is worse than reported or the destination does not serve the plan. An unexpected arrival threat can justify the same choice.

Neither result proves courage or failure. The purpose of a scout is to change the quality of the next decision. Sometimes the best information it can return is that the commitment should end here.

Do not allow sunk time to argue for movement. Resolving the Signature, warping to the Wormhole and crossing it do not create a debt that must be repaid by going deeper.

The arrival supplies new evidence. Let it revise the plan.

## Return Is Valid

Beginners often imagine a successful entry as a smooth continuation into the system. That picture makes an immediate return feel like a mistake.

It may be the most disciplined outcome available.

A Pathfinder who finds an unexpected destination or an unhealthy connection has still completed the purpose of entry. The same is true after finding an unusable shared record or occupied arrival Grid. In every case, the Unknown beyond the Wormhole has been reduced before the operation commits more.

Return still requires care. The Session Change must have ended. Polarization history must be understood. The Wormhole must still support the ship. The departure side may also have changed while the pilot was away.

An abort is therefore not a reversal of time. It is another transit made under new conditions.

Report what caused it. *Returned because the route felt wrong* gives the next pilot little to use. *Returned after observing an unexpected system, unconfirmed exit Bookmark and two ships on the arrival Grid at this Timestamp* preserves the decision and its supports.

This is how caution becomes operational knowledge instead of private anxiety.

Success does not require the ship to remain beyond every threshold. It requires the pilot to know why the ship is on either side.

## Field Principle

Entry moves more than a ship. It changes the available observations, adds mass to the connection and begins a directional history the pilot may later depend upon.

Read the door before crossing. Use the arrival pause. Preserve the exit before leaving its Grid. Continue only from the picture the new system actually provides.

# Chapter 7 - Bookmark Discipline

The emergency is small enough to feel embarrassing. The system contains three Bookmarks named Exit. Two are old. One belongs to another branch. The Pathfinder has seconds to choose which mark still leads towards Home.

All three positions may have been saved correctly.

The failure lies in what they no longer communicate.

A Bookmark is one of the simplest objects in the Pathfinder's work. It preserves a position and makes that position usable later. Yet a position without clear purpose, ownership or age can turn exact coordinates into a poor decision.

Bookmark Discipline begins with a modest idea: save the right place, then make its meaning survive the moment in which it was obvious.

## Position With Meaning

The client can preserve coordinates far more accurately than a pilot can remember them. That does not make the record self-explanatory.

A Bookmark answers *where?* Its label, folder, creation data, expiry and relationship to other records help answer *what is this position for?* Beyond the Bookmark, the Shared Map shows how that position participates in the current route.

Those answers should support one another without being mistaken for the same thing.

The Bookmark does not know that a Wormhole has collapsed. It continues to point at the saved position. It does not know that a route has become unsafe, that a label uses an abandoned naming scheme or that the person opening the folder understands the local alias.

That meaning is editorial work performed in the field. The Pathfinder selects what deserves preservation, names its function and removes or expires it when the function no longer exists.

More Bookmarks do not automatically produce better navigation. A short, maintained set can carry more usable knowledge than a crowded folder of exact but unexplained positions.

The standard is not whether a location was saved. It is whether the intended pilot can identify, access and use the correct location when the context is no longer fresh.

## **Object or Coordinate**

The current location system can preserve either an object or a coordinate. The distinction affects what the Bookmark means.

An object Bookmark is created from something the client can identify, such as the Wormhole on the Grid. It preserves the position of that object when saved. A coordinate Bookmark preserves the ship's position when the location is submitted, including a position created while the ship is moving or in warp.

Both are useful. They answer different purposes.

For a return connection, the Wormhole itself is normally the object that matters. Saving the Wormhole makes the record about the door. Saving the ship's nearby coordinate makes the record about where the ship happened to be. The two positions may be close enough to look related and still produce different arrivals or tactical consequences.

The same distinction separates a resolved scan result from the object found after warping to it. A Bookmark created from the result preserves the scan-derived destination. A Bookmark created from the Wormhole on Grid preserves the door itself. Do not silently promote one into the other merely because both brought the Pathfinder to the same Grid.

Coordinates are not inferior. A perch, observation point or mid-warp location exists precisely because the pilot wants a position apart from the object. Discipline means naming that purpose honestly.

Before saving, decide whether the record is meant to locate the object or the ship.

## **Save the Door**

Every traversed Wormhole needs a usable Bookmark on each side.

The reason follows from the connection model. The two ends occupy different systems and different coordinates. A record of the departure end cannot bring the ship to the arrival end. Although a Shared Map may relate the systems, it cannot create an in-game warp destination that was never saved.

On first arrival, the return end carries the clearest meaning it will ever have: it is the door just used. Save the Wormhole object before warping away. Do the same work on the other side when that endpoint is first encountered.

This creates two Bookmarks for one connection, not a duplicate.

Each endpoint should be identifiable from within its own system. The label must not require the pilot to stand on the other side before understanding it. If the group uses local Chain names, the name should indicate the destination or direction from the side on which the Bookmark exists.

A useful check is to imagine the connection closed and the map unavailable. Would the label still reveal which saved point was intended to lead Home, move outward or reach a named neighbour? If not, too much meaning lives outside the Bookmark.

Do not overload the label with every fact known about the Wormhole. Save the door first. Relate it to the map. Put changing state where it can be maintained.

## Name the Function

Labels are read under different conditions from those in which they are written. A label may be created in a quiet system and searched for later while the Grid is contested.

The first element should therefore answer the most urgent operational question. Is this the return, an outward connection, an observation point or a location not yet verified?

A simple label grammar can be built from four fields:

FUNCTION | DESTINATION | LOCAL ID | QUALIFIER

The fields are a model, not a universal corporation rule. A group may choose different separators, abbreviations or aliases. The order matters more than the typography.

- FUNCTION tells why a pilot would use the position.
- DESTINATION relates the Bookmark to the Chain.
- LOCAL ID ties it to the visible identifier on this side when useful.
- QUALIFIER carries only the short-lived warning needed at selection time.

For example, a homeward Wormhole Bookmark might put RETURN before a Chain alias and local Signature identifier. A newly found endpoint whose destination is not confirmed should say UNVERIFIED rather than borrowing the most likely answer.

Avoid names that depend on the creator's private perspective. My exit, next hole and the new one decay as soon as another pilot reads them or a second connection appears.

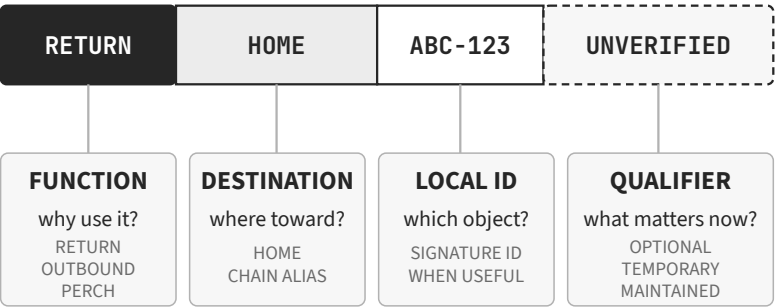
The best label is not the most complete sentence. It is the shortest wording that preserves the decision-relevant distinction.



**LABEL GRAMMAR • FUNCTION FIRST**

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EXAMPLE BOOKMARK LABEL



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**IDENTITY SHOULD OUTLIVE STATE**

The grammar is a model, not a mandatory corporation convention.

**Figure AFH-B1-FIG-008 — A short label begins with function.** Function answers why the position would be used, Destination and Local ID preserve identity, and an optional Qualifier carries only a warning that will be maintained.

## Identity and State

A Wormhole’s identity and its present condition age at different rates.

The endpoint position and local identifier help distinguish the object. Its destination relationship gives it a place in the Chain. Reliable Lifetime and mass condition describe a state observed at a particular time.

Combining all of these into one label can be convenient. It can also turn the label into a stale report.

If EOL remains in a Bookmark after the connection has been replaced, the old warning may attach itself to the wrong door. If FRESH remains after hours of traffic, the label becomes an assurance no one actually observed. A label that names only the state may become meaningless when the state changes.

Use the Bookmark to preserve identity and immediate function. Use the Shared Map or accompanying note to preserve state with a Source and Timestamp. If the workflow copies a critical warning into the label, treat that text as another record that must be updated or retired.

This is not an argument against visible warnings. It is an argument against timeless warnings.

The distinction makes correction easier. A pilot can update the condition of a known endpoint without inventing a new identity. The group can retire the connection without pretending the systems on either side vanished.

Name what the Bookmark is. Timestamp what the Wormhole was observed to be.

## Personal or Shared

Personal and Shared Locations solve different coordination problems.

A personal Bookmark is controlled by the individual pilot. It can preserve an emergency return even when a group folder is unavailable or wrongly configured. A Shared Location allows authorised pilots to use a common position and reduces the need to reproduce the same work separately.

Neither should be assumed to substitute for the other in every operation.

A personal copy can protect the scout from a permission error, but it does not help a following Fleet unless the location is also shared through an agreed method. A Shared Location can support the group, but access depends on the folder, Access Lists and its current availability.

The operational question is therefore twofold:

*Can I use this position? Can the people who depend on my report use it?*

Answer both before announcing the route as ready.

Redundancy should be deliberate. Saving an essential return personally and in the correct shared folder may be justified. Copying every temporary location into every available folder produces clutter and creates several records that can age differently.

The group needs a declared source of operational truth. If the Shared Map carries state and the shared Bookmark folder carries warpable positions, say so. Personal copies then remain recovery aids rather than competing authorities.

## Access Takes Time

A Shared Location is not necessarily usable by everyone at the instant it is created.

The current system places Shared Locations in folders controlled by Access Lists. Pilots must have the appropriate access and the folder must be connected and available. Newly added Shared Locations also have a short delay before they become usable as warp destinations; the current documented delay is two minutes.

This changes the meaning of *shared*.

It may mean that the record has been placed in a shared folder. It does not yet prove that a specific pilot can see it, that the folder is online for that pilot or that the new Bookmark has become warpable.

During ordinary work, the delay is easy to absorb. During an extraction or Fleet movement, it can become the difference between information and capability. A scout who reports *Bookmark shared* should distinguish creation from confirmed usability.

The receiving pilot can close the loop with a precise response: the folder is connected, the location is visible, and the warp command is available. That confirmation is stronger than assuming that no error message means the handoff succeeded.

Permissions can also change. A Bookmark may remain correct while becoming unavailable to the people who once used it. Diagnose the layers separately: position, label, folder, access and readiness.

The location can be true while the handoff has failed.

## **Time Belongs Inside**

Every temporary Bookmark needs a retirement expectation.

The location system can attach an automatic expiry to a saved position. This is useful for Wormhole endpoints and short-lived field marks because the objects they describe may disappear while the coordinates remain.

Expiry is not proof of validity until that time. It is only a limit on how long the record will be retained automatically.

A Wormhole can collapse well before its Bookmark expires. A long-lived tactical position may remain useful after a temporary expiry would remove it. The correct duration follows from purpose, not convenience.

Treat creation time and expiry as part of the Bookmark's meaning. When a pilot sees an old position with no living connection in the Shared Map, age should encourage verification rather than trust. When a critical return point has a near expiry, the group should know whether the position will disappear during the operation.

Manual clean-up remains necessary. Remove or retire Bookmarks whose objects no longer serve the stated function. If evidence is incomplete, mark the record unverified instead of deleting the only clue another pilot may need.

Time discipline prevents two opposite errors: keeping every coordinate until the folder becomes unreadable, and deleting uncertainty before the group has resolved it.

A temporary route deserves a temporary record with a visible age.

## Keep Labels Short

Long labels often begin as an attempt to be helpful. They end by hiding the first distinction the pilot needs to see.

The Locations window already carries structured information such as system, creation time, expiry and creator. Repeating all of it inside the label spends attention without adding meaning. Changing context belongs in Shared Map fields for destination class, connection state, notes and Source.

Use the label for selection.

That usually means a stable function, a destination reference and a local identifier. Add a warning only when it changes whether the position should be used now. Move explanations into notes or the map.

Abbreviation is helpful only when the intended readers share it. A private three-letter code saves space for its author and creates delay for everyone else. Define the group's grammar before relying on it in a field handoff.

Sorting also matters. If labels begin with inconsistent decoration, personal names or prose, related Bookmarks may scatter through the list. A consistent function-first pattern lets the eye find returns, outward connections and unverified positions as groups.

The measure of a naming scheme is not how clever it looks in an example. It is how quickly a tired pilot can reject the wrong Bookmark. Short labels carry more when the surrounding records do their own work.

## Verify the Record

Creation is an action. Verification is an Observation.

After saving an important Bookmark, find it in the intended folder. Confirm the label, endpoint, expiry and availability. If it was shared,

confirm that a second pilot can use it when the operation depends upon that handoff.

When practical, verify the Bookmark from a position that reveals mistakes without creating unnecessary risk. The purpose is not to perform ceremonial test warps. The check catches predictable failures: the wrong folder, a coordinate saved instead of the object, a duplicated label or a Shared Location still unavailable.

Reverification belongs to later use as well. Before committing an expensive ship to an old Bookmark, compare it with the current Grid, Probe Scanner and Shared Map. The position may remain while the Wormhole does not.

If the records disagree, preserve the disagreement long enough to diagnose it. Do not rename the Bookmark merely to make it match the map. Determine whether the position, the map relation or the current Observation is wrong.

An exact coordinate can be perfectly stored and operationally obsolete. Verification asks whether the purpose still exists.

## **Field Principle**

A Bookmark preserves a position. Discipline preserves what that position means.

Save both ends of every traversed connection. Name function before detail. Separate identity from changing state, and confirm that the intended pilot can actually use what has been shared.

# Chapter 8 - Navigation and Mapping

The map shows four systems between the Pathfinder and Home. The line is clean. Every node has a name. Nothing on the screen looks uncertain.

At the second Wormhole, the expected connection is gone.

The map was not useless. It was a report that outlived one of its edges. Navigation failed only if the pilot mistook that report for a permanent road.

In Anoikis, mapping does not copy a fixed network. It assembles a temporary argument from systems, Wormholes, Bookmarks, observations and time. Navigation is the work of testing that argument one connection at a time.

The map gives the Chain a shape. The Pathfinder keeps that shape honest.

## Shape of Passage

A useful Wormhole map begins with two kinds of thing: systems and the connections between them.

The systems are places. They persist beyond a particular visit. The connections are opportunities for passage. They open between places, carry traffic and eventually collapse.

This difference explains the common node-and-line shape used by current mapping tools. A node can hold the System Identifier, Class, Type, Effect and other system context. A line can hold the Wormhole that presently relates one node to another.

The line is not a measured distance. Two systems drawn next to one another may be one Wormhole apart, but the spacing on the screen

says nothing about the physical length of the transit. Its topology shows which passage leads to which place.

That abstraction is powerful because it matches the decision. A Pathfinder usually needs to know how many current connections must survive, which ones have poor condition and where an alternative branch begins. Decorative geography would add little.

The same abstraction becomes dangerous when the clean shape hides weak evidence. A line entered from an old report can look identical to a line crossed moments ago. The map must carry Source and freshness, or its geometry will appear more certain than the work beneath it.

Map the relationship. Preserve the reason for believing it still exists.

## **Nodes and Edges**

Each node should identify a system without asking a Chain alias to replace its real identity.

A local name such as Home, A1 or East Branch can make communication faster. It should remain an alias attached to the current map. Identity that other pilots and data sources can recognise comes from the System Identifier and current proper name, when one exists.

Each edge should represent one Wormhole connection. It needs its own endpoint information, observed condition and relationship to the Bookmarks used on both sides.

This separation prevents several common distortions:

- a system is not deleted merely because one connection to it collapses;
- two Wormholes between relevant places are not compressed into one vague route;
- the state of a Wormhole is not attached to the destination system as though it described every entrance; and
- a Chain alias can be changed without rewriting the underlying system.

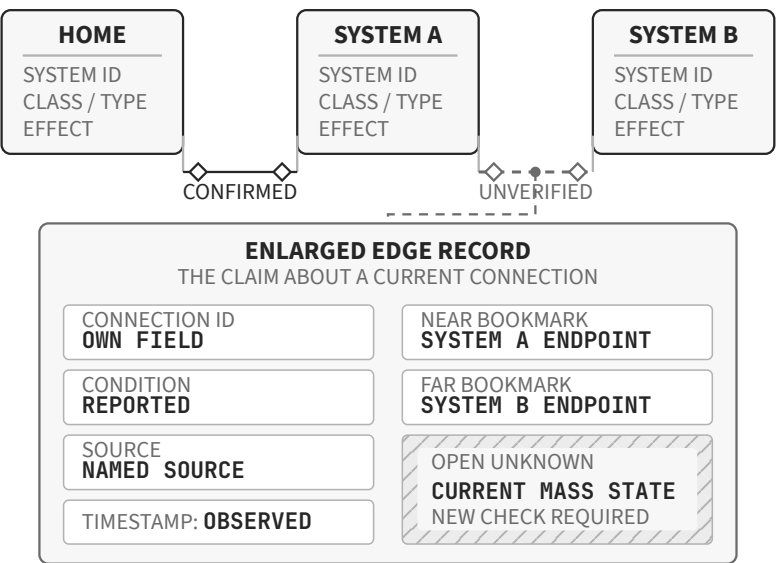


The model remains simple enough to read under pressure. The node answers *where*. The edge answers *through what current connection*. The endpoint Bookmark answers *from which position in this system*.

Navigation requires all three. A system name without an edge does not supply a route. An edge without a Bookmark may describe a route the current pilot cannot warp to. A Bookmark without the map may reach a Wormhole without revealing which branch follows.

Together they turn scattered records into a path.

**PLACE • PASSAGE • LOCAL POSITION**



**Figure AFH-B1-FIG-009 — A map separates place, passage and position.** Nodes identify systems, edges represent current Wormhole Connections, and endpoint Bookmarks preserve the local positions from which those Connections can be used. Source, Timestamp and Unknown remain attached to the claims they qualify.

## Endpoints Matter

Chapter 7 preserved two endpoints for every traversed connection. Mapping gives those positions one relationship without merging them.

A sound edge points to both endpoint Bookmarks or to the naming information needed to select them. If only one side is preserved, the map describes a relationship that can be entered from one direction but may not be recoverable from the other.

Direction also changes language. A Bookmark marked RETURN in system B may refer to system A. The corresponding Bookmark in system A is not another return unless the operation defines Home on system B's side. Labels describe use from the system in which they exist.

This becomes especially important when branches meet. One pilot may enter a system through one Wormhole and leave through another. Calling both the `exit` stores the route in memory rather than in the records.

The map should allow a receiving pilot to trace a sentence without guessing:

*From this system, use this endpoint Bookmark, cross this connection and expect to arrive in that system.*

Every hop in a route is that sentence repeated under new conditions.

## State the Edge

A connection record should contain only what can be defended, but enough to support a decision.

At minimum, preserve:

- the systems currently related;
- the local endpoint identifiers or Bookmark references;
- the observed Reliable Lifetime and mass condition;
- the maximum ship-size indication when it affects the operation;
- the Source and Timestamp of those observations; and

- whether the relationship was crossed, directly observed or only reported.

Not all fields share one freshness. The systems related by a crossed Wormhole are strongly derived from the transit. The mass condition may have changed with that transit. A destination clue read before crossing may remain useful, but the actual arrival now supplies stronger evidence of the destination.

Update the fields that changed without refreshing the ones that were not observed. Editing a map node at 14:20 must not make a Wormhole condition last seen at 13:50 appear twenty minutes newer.

Broad last updated labels can mislead here. Such labels describe the record, not necessarily each claim inside it.

A good Shared Map keeps those fields separate. It can show that the edge and its lifetime were observed now, while the mass state came from an older report and the far-side Bookmark remains unconfirmed.

Honest partial information is navigable. False uniform freshness is not.

## **Routes Are Conditional**

A route is a sequence of edges that the map currently believes can be used.

The word *currently* carries most of the risk.

Every additional Wormhole introduces another condition that may fail. Its Reliable Lifetime can advance. Its mass condition can worsen. It can reject the ship because of size or Polarization. Another pilot can alter it between the scout's report and the Fleet's arrival.

The shortest route therefore need not be the best route. A longer branch with healthier, fresher connections may support a larger commitment. A one-hop exit near collapse may suit a disposable scout and be unacceptable for repeated industrial traffic.

Route planning should compare at least:

- number of Wormhole transits;
- condition and age of each connection report;
- ship-size and mass requirements;
- known traffic or threats;
- Polarization history of the pilot; and
- alternatives available if one edge fails.

These factors do not produce a universal score. They expose where the plan is fragile.

When communicating a route, include its limiting edge. *Four hops to Home* is a shape. *Four hops to Home, with the second connection Expired and no mapped alternative* is a decision.

The map should help the pilot see both.

## Freshness Has Layers

Time does not act upon every map element in the same way.

A system's Class or special Type is relatively stable reference data. A Wormhole's Reliable Lifetime and mass condition are temporary observations. A ship seen on Directional Scanner may matter for seconds. A Bookmark can retain coordinates after the object it described has gone. One age marker for the whole node cannot represent those layers honestly.

Attach freshness to the changing claim:

- when was this connection last observed?
- when was its condition read?
- when was the endpoint Bookmark verified?
- when was the system last scanned for Signatures?
- when was the threat report produced?

This does not require filling the map with timestamps until it becomes unreadable. The interface can show compact age indicators while

retaining the underlying times in details. What matters is that a recent edit cannot launder old information into looking new.

Stable data also needs a Source even when it does not need continual observation. A current SDE classification and a pilot's visual guess should not acquire the same authority merely because they display the same Class.

Freshness answers *when*. Source answers *from where*. The map needs both when the claim can change or be wrong.

## Preserve Unknowns

A map invites completion. Empty fields look unfinished. Unconnected nodes look untidy. That visual pressure encourages guesses.

Resist it.

Record an unresolved Signature at the level the scan supports. Do not convert an indicated Wormhole destination into a confirmed system. Let the map show when an endpoint Bookmark has not been tested.

Unknown is not the same as absent.

An unscanned branch may exist. An old edge may already be gone. A missing mass report does not mean full mass. No threat marker does not mean no threat.

Useful map symbols distinguish at least three cases:

- confirmed information;
- Reported or incomplete information; and
- no information.

The exact colours or icons depend on the tool. Their definitions must be shared by the people using the map. A yellow line is not helpful if one pilot reads it as caution and another as unverified.

Unknowns also guide work. They show the next scout where a fresh transit, condition check or Signature pass will improve the route most.

A complete-looking map can hide uncertainty. An honest map makes uncertainty actionable.

## Reconcile the Picture

Two pilots can return different reports without either acting carelessly. One crossed the Wormhole ten minutes ago. Another now finds no object at the Bookmark. A third still sees the edge in a mapping tool because no one has retired it. These statements describe different times and interfaces.

Do not force them into agreement by choosing the most convenient one. First, preserve the observations and their Timestamps. Then ask which event could relate them. The Wormhole may have collapsed. The wrong Bookmark may have been selected. A folder may be unavailable. The map may contain two connections that were compressed into one label. Reconciliation is the process of finding that missing relationship.

When evidence shows that an edge is gone, retire the connection rather than deleting the history without explanation. The old record can show why a route or Bookmark still exists and prevent another pilot from rebuilding the same mistake.

When the evidence is incomplete, mark the edge unverified and direct the next check. A map that says *not found from this Bookmark at 14:20* is more useful than one that silently removes the line while another pilot may still be in the far system.

Shared truth is not produced by making every screen match. It is produced by explaining why they differ.

## Tools Extend Memory

Current Wormhole mapping tools can share systems, connections, Signatures, notes and route information across a group. Some can notice

character transits, reconcile pasted Probe Scanner results or estimate connection state from user-entered traffic.

These features reduce clerical work. They do not remove the observer. Automatically adding a node can show that a tracked character changed systems. It may still require the pilot to identify which Wormhole was used. An estimated mass remainder depends on the transits recorded and the mass assumptions applied. A coloured edge depends on someone entering the correct condition.

The more smoothly a tool updates, the easier it is to forget which parts came from the client and which parts were inferred.

Treat automation as another Source. Know what event it observes, what it derives and what it cannot see. If a tool tracks position through external data, understand that delayed or ambiguous events may produce the wrong connection. Current community mapping documentation explicitly warns that some non-Wormhole movements can be misinterpreted.

No specific mapper is required by this book. The operational standard survives the interface: systems and connections remain distinct, changing claims retain age and Source, and a pilot confirms the next edge before depending upon it.

The tool should make disciplined work easier to see, not make discipline invisible.

## **Navigate by Confirmation**

Following a Shared Map is not the passive part of Pathfinder work. Every hop tests the route.

Before warping, match the current system, intended edge and endpoint Bookmark. On Grid, confirm that the Wormhole object exists and read the state relevant to the ship. After transit, confirm the destination and

preserve the far endpoint. Then update the map with what the crossing actually established.

This rhythm keeps errors local.

A system check can catch the wrong Bookmark before warp. A Grid check can stop the transit when the Wormhole state is worse than Reported. When the destination differs from the mapped node, the arrival check can prevent the false edge from spreading deeper into the Chain. Speed comes from making each confirmation small and familiar, not from removing it.

The pilot should also know which Observation would cause the route to stop. An Expired connection, unexpected ship-size restriction, missing endpoint or unexplained destination mismatch may require reassessment. The threshold depends on the commitment, but it should exist before the surprise.

A map offers the next expected relationship. Navigation confirms whether that relationship still deserves a ship.

## **Recover From Drift**

Sooner or later, the Chain changes around a pilot.

The mapping response comes before route recovery. Preserve the discrepancy: confirm the current system, identify the expected edge and record when it was last known to work. Retire it only when the evidence supports collapse; until then, mark it Unverified and direct the next check.

A replacement Wormhole is a new edge even when it reaches a familiar system. It needs new endpoints, Observations and time. Reusing the old line would make the map look repaired while hiding what changed.

Chapter 15 handles the larger problem of getting Home after an edge fails. Here the standard is narrower: let the Shared Map admit drift quickly enough that recovery can begin from an honest picture.



## Close the Loop

A Pathfinder's map work is complete only when another decision can safely use it.

That requires more than drawing the new edge. The endpoint Bookmarks must exist. The destination must be confirmed at the level reported. Changing state must carry a Timestamp. Important Unknowns must remain visible. The group must know whether the route is ready, provisional or already degrading.

A concise handoff can state:

- what changed in the Chain;
- which connection was personally crossed;
- which endpoint Bookmarks are usable;
- which state observations are fresh;
- what remains Reported or Unknown; and
- what condition should stop the next movement.

The handoff does not need to narrate the entire scanning session. It needs to preserve the supports of the route.

That distinction separates a private map from shared navigation. A private map helps its author remember. Another pilot can decide from a Shared Map without borrowing the author's unspoken assumptions.

When the next pilot confirms a hop, the field sequence begins again: Observe → Record → Understand → Evaluate → Decide → Act → Observe again.

The Chain is never finished. It only needs to be current enough for the commitment being made.

## Field Principle

A living map models systems connected by temporary doors. Its lines are claims, not roads.

Relate every edge to usable endpoint Bookmarks. Keep Source, freshness and Unknowns visible. Navigate by confirming the next connection, not by trusting the cleanliness of the line.

## Part III - Survival

Exploration gave the Pathfinder a way to find hidden places, preserve the doors between them and turn those doors into a Shared Map. Survival begins when that picture must remain useful while other pilots are moving through it.

The next five chapters deal with information that is present but incomplete. Local withholds silent pilots. Directional Scanning reaches only its current volume and filter. Polarization remembers a transit that the ship has already left behind. Environmental Effects alter familiar performance, and threats take advantage of every confident assumption.

None of these conditions makes Anoikis unknowable. They change the standard of proof. The Pathfinder survives by asking what each instrument can establish, how quickly the answer ages and which decision can still be reversed if the picture is wrong.



# Chapter 9 - Local Does Not Exist

The Local window is open. No other name appears.

On the Wormhole Grid, a set of Core Scanner Probes vanishes before the Pathfinder can narrow the Directional Scanner. A moment later, a wreck appears on a different scan. Nothing has spoken. Nothing in Local explains either change.

The title of this chapter is deliberately severe. Local exists as a chat channel in Wormhole Space. What does not exist is the automatic population roster pilots learn to expect elsewhere.

That missing roster changes more than one window. It removes the easiest shortcut between *I see no name* and *no one is here*. Survival begins when the Pathfinder stops asking Local to count the system and starts building presence from evidence with known limits.

## A Missing Roster

Local in Wormhole Space uses delayed mode. A pilot does not automatically appear in its population listing merely by entering the system. The pilot becomes visible there by speaking.

This means the window answers a narrow question:

*Who has revealed themselves through Local?*

The broader question remains unanswered:

*Who is present?*

The difference is fundamental. A silent scout, a cloaked observer, a hunter crossing the system and a resident waiting near a connection can all remain outside the list. An empty list may exist beside an active operation.

Elsewhere, pilots can use Local as an early change detector. A new name appears, and attention turns towards the possible arrival. In Anoikis, the arrival can happen without that signal. The first warning may instead be

a ship on Grid, probes in space, a new Signature or an old route changing under traffic.

Local has not become broken. It is operating under a different information model. The error comes from carrying an old interpretation into that model.

## Silence Has Limits

Silence is an Observation, but only when its boundary remains attached. At 14:10, the Pathfinder can observe that Local shows no other speaker. That statement is precise. It records what the client displayed, where and when. It may support a decision when combined with other evidence.

The statement *the system is empty* goes further. It converts one silent channel into a census. The interface did not supply that conclusion.

This distinction prevents two opposite mistakes. The first is comfort: nobody is listed, so the ship acts as though nobody can interfere. The second is panic: because Local cannot prove absence, every system is treated as though an attack is already under way.

Neither response reads the evidence.

A silent Local removes one possible disclosure. It neither adds nor removes a threat. The decision must come from the remaining observations, the value at risk and the cost of another check.

Uncertainty is not a hidden enemy. It marks the limit of the available claim.

## Speech Reveals

Speaking in Local changes the information available to everyone receiving the channel. The message carries content, but the act also reveals the character to the population listing.

That disclosure deserves intent.

A greeting may invite contact. A warning may prevent a misunderstanding. A public message may be part of an operation. None is automatically wrong. The mistake is treating speech as though it were private conversation that leaves the surrounding picture unchanged.

A name in Local also proves only that the pilot revealed themselves through communication. The list does not identify the pilot's current Grid, ship, purpose or relationship to anything detected elsewhere. A speaker may be harmless, hostile, departing or deliberately distracting. Do not join a visible name to a Directional Scanner contact merely because both are available at the same time. That relationship is Derived and needs support.

Local is therefore useful evidence when it changes. It can establish that a character chose to speak. It cannot turn that character into the explanation for every unexplained object in the system.

## **Presence Leaves Traces**

Pilots who remain silent can still alter the environment.

A ship may enter a Directional Scanner volume. Core or Combat Scanner Probes may appear. Drones, wrecks or deployed objects may suggest current or earlier activity. A connection can change mass state. A new K162 can become visible among the system's Signatures. Movement reported by another pilot may enter the Shared Map.

Each trace answers a different question.

A wreck establishes that destruction occurred, not who caused it or whether the cause remains nearby. Probes establish that probes were within the scan volume when measured, not which pilot launched them or which result they are pursuing. A new connection establishes a route that was not in the earlier picture, not that a hostile fleet is already using it.

These traces become useful when they are allowed to remain partial. Together, they can raise or lower confidence in a quiet system. Separately, none should be forced into a complete story.

The Pathfinder is not trying to reveal every hidden pilot. The task is to notice whether the present evidence still supports the next commitment.

## Evidence Has Reach

Every observation covers a volume, a moment or a configured view.

The Overview describes the current Grid through its active settings. The Directional Scanner reaches beyond the Grid, but only through its selected range, angle and filter. The Probe Scanner exposes Signatures and Anomalies, not a live list of ships. Reports from other positions and times live on the Shared Map.

Their limits do not make them weak. Their limits make them interpretable.

Suppose Local is silent, the current Grid is clear and a broad Directional Scan returns no ship. The Pathfinder has assembled more evidence than Local alone could provide. Yet the result still excludes pilots beyond the scan range, outside the eligible object types or hidden by mechanics the scanner cannot overcome.

The correct conclusion may be:

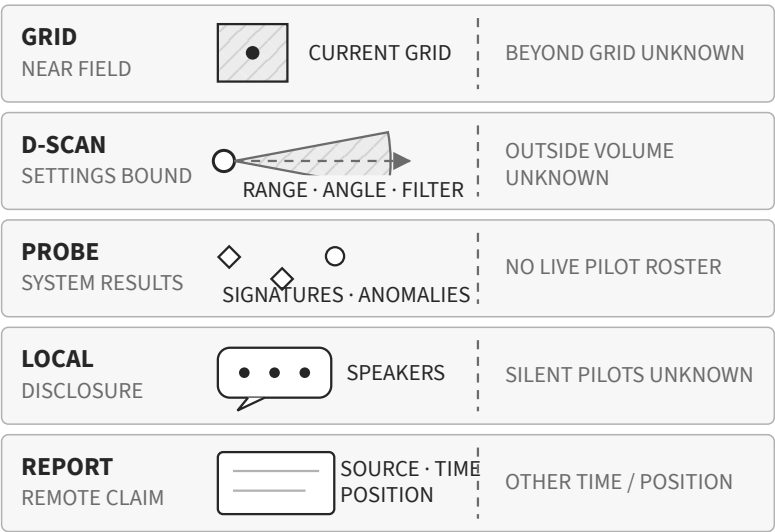
*No visible ship was returned from this position by this scan; Local has disclosed no speaker.*

That is not timid wording. It gives another pilot the exact support for the present assessment and reveals what another position or later scan might add.

Confidence grows by joining bounded observations, not by removing their boundaries.



**ONE SYSTEM · FIVE SOURCES · FIVE BOUNDARIES**



COMBINE OBSERVATIONS · KEEP THEIR LIMITS

**Figure AFH-B1-FIG-010 — Evidence reaches only as far as its Source.** Grid, Directional Scan, Probe Scanner, Local disclosure and reports cover different spaces, settings and moments. Combining them can strengthen a decision; it does not erase what each Source left Unknown.

## Build a Watch

Awareness in Anoikis is a repeated comparison, not a single clearing action.

The Pathfinder first establishes a baseline: the current Grid, Local, a broad Directional Scan, the known Signatures and the relevant edges on the Shared Map. The baseline need not prove safety. It describes the system closely enough that later change can be recognised.

The next observation is valuable because it can differ.

A ship appears where none was returned before. Probes disappear. A connection changes condition. A reported pilot fails to arrive. The difference may carry more meaning than either snapshot alone.

The rhythm should follow exposure. A ship lingering uncloaked at a valuable site needs a shorter interval between checks than a cloaked scout holding away from traffic. A fleet waiting to cross may need reports tied to the connection rather than general statements about the system.

Habit helps only while it serves the question. Repeating a scan without noticing its filter or allowing Local to occupy attention can create activity without awareness.

A good watch knows what could change the decision and checks for that change before the decision becomes difficult to reverse.

## Count No One

Without a roster, population estimates become tempting.

One Structure, two scanner probes and a wreck can become *three residents* in the mind. A single ship type can become one pilot. Several ships can become a fleet. The system begins to feel counted even though the observations never supported a number.

Avoid that false precision.

Structures can outlast their users. Objects can be abandoned. One pilot can control different ships over time, while several pilots can produce similar traces. Directional Scanner results can overlap activity from different locations and moments.

Operational language should describe contacts and evidence:

- one visible ship on the current Grid;
- two ship returns on the latest broad scan;
- Core Scanner Probes newly observed;
- no speaker disclosed in Local; and

- population Unknown.

This report is longer than *two in system*, but it is much harder to misuse. It also allows the next observer to recognise which part changed.

The Pathfinder rarely needs a perfect census. The immediate need is to know whether present contact, possible contact or unexplained change alters the planned action.

## Report the Silence

Reports about a quiet system often lose their boundaries in transmission.

*Clear* can mean the Grid was empty, no ship appeared on a broad Directional Scan, no combat contact was found, or simply that the speaker saw nothing unusual. Its recipient must guess which meaning was intended.

Replace the verdict with the observation that supports it.

A useful report can contain:

- the system and observing position;
- the time of the latest check;
- what Local disclosed;
- the Directional Scanner range, angle and relevant filter;
- ships, probes or activity traces returned; and
- what remains outside the observation.

The report does not need every unchanged object. It needs the settings and facts that another decision depends upon.

*J123456, 14:10: no Local speakers; broad ship-and-probe scan from the inbound Wormhole returned no contacts. Far system not yet checked.*

That sentence preserves silence without turning it into safety. It also directs the next useful observation.

## **Speak Deliberately**

Local can still serve human purposes in Wormhole Space.

Pilots may communicate after an accidental encounter, answer a rescue effort or identify themselves when an operation requires it. The delayed roster does not make every message a mistake.

It makes every message a disclosure.

Before speaking, the Pathfinder should understand what the message is meant to achieve and what information the act gives away. Silence may preserve ambiguity. Speech may reduce it for both sides. The better choice depends on the people involved and the consequence of being identified.

The same discipline applies when someone else speaks. Do not answer automatically. Observe the message, record the character if relevant, compare the timing with other changes and decide whether a response improves the situation.

Communication is an action within the field, not a window outside it. It can change behaviour, reveal attention and invite further contact.

Use it for a reason.

## **Recheck the System**

The most dangerous quiet is the quiet remembered after the observation has expired.

A Pathfinder enters, scans once and finds no contact. Ten minutes later, the same system is described as empty because nothing dramatic interrupted the work. In that interval, Wormholes may have carried traffic, probes may have crossed a volume between scans and a cloaked observer may have remained undetectable throughout.

The original scan can remain true. Its authority has changed.

Rechecking does not mean repeating every instrument at a fixed rate. It means matching freshness to consequence. Before leaving a defensible

position, crossing an ageing connection, exposing a valuable ship or committing a group, refresh the evidence that action depends upon.

When new evidence disagrees with the baseline, pause the story. A newly visible ship is not automatically the owner of the earlier probes. A missing wreck did not erase the fight. Record the change first; derive the explanation second.

Survival does not come from making uncertainty disappear. It comes from noticing when an old answer is being asked a new question.

## **Field Principle**

Local in Wormhole Space is a channel of voluntary disclosure, not an automatic population roster.

Treat silence as a bounded Observation. Build presence from Grid, scans, Signatures, connection state and shared reports. State what those Sources showed, when they showed it and what remained beyond their reach.



# Chapter 10 - Directional Scanner

The scanner returns a ship.

The Pathfinder narrows the angle. The ship remains. The range is reduced, and the result disappears.

Nothing has been located precisely. No pilot has been identified. Yet the system is no longer as quiet as it appeared one scan ago.

Its reach beyond the current Grid makes the Directional Scanner valuable without requiring probes. It becomes dangerous when a clean list is mistaken for continuous coverage or a contact list for a complete tactical picture.

The instrument does not pronounce a system safe. It takes a bounded snapshot from the ship's position. Pathfinder work begins by knowing the shape of that snapshot.

## A Manual Snapshot

A Directional Scan is an active measurement. The returned list belongs to the moment at which the scan refreshed.

Ships continue to move after that moment. A contact can warp, cloak, leave the range or enter it while the old result remains on screen. Probes can be recalled. A new ship can cross the system between two scans.

A result therefore needs time even when the interface does not ask the pilot to write one down. *No ships on scan* is already ageing as it is spoken.

Repeated scans create a sequence. If the same object appears through several measurements, the Pathfinder can build confidence that it remains within the observed volumes. If it disappears, several explanations remain possible: movement, cloaking, a changed setting, a changed filter or a position outside the next volume.

The scanner reports the difference. The pilot supplies the interpretation.

Treat every refresh as a new Observation rather than an update that silently rewrites the past. The earlier result may explain how the current picture changed.

## The Scan Volume

The scanner begins at the ship. Its range sets how far the measurement extends. Its angle sets how much space around the chosen direction is included.

At the widest angle, the volume surrounds the ship and answers a broad presence question. Direction is largely surrendered for coverage. At narrow angles, the volume becomes a cone and the result carries more directional meaning while covering less space.

The cone follows the camera alignment used by the scanner, not the direction the hull happens to face. A ship can be travelling one way while the Directional Scanner examines another.

That geometry explains both the tool's power and its silence. An object can be close enough but outside the angle. It can lie in the correct direction but beyond the range. Even inside the geometric volume, the filter or the scanner's detection rules may exclude it.

An empty result therefore means:

*No eligible object was returned from this configured volume at this refresh.*

Everything after that sentence is interpretation.

## Range and Angle

Range and angle trade coverage for discrimination.

A broad, long-range scan is useful when the question is whether detectable ships, probes or other relevant objects exist around the current position. It leaves their direction unknown.

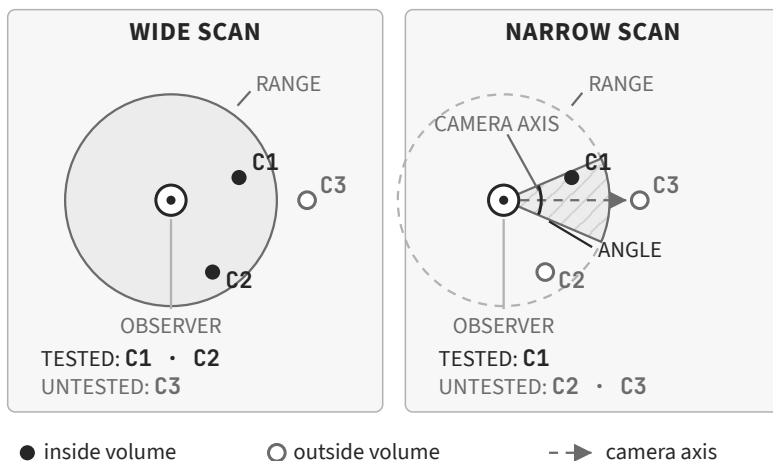


A narrow scan can test a suspected line towards a celestial, Signature area or other point of interest. A positive result gives direction within the width of the cone. It still does not provide coordinates.

Reducing range can bracket a contact. When a ship appears at one setting and disappears at a shorter one, its distance lies beyond the shorter boundary and within the longer boundary at the times measured. The contact may move between those scans, so the bracket is an estimate, not a fixed location.

The present effective range should be read from the current client and ship conditions. Current equipment and fleet effects can modify Directional Scanner range. A remembered universal maximum is therefore a poor foundation for a field report.

Report the range used. The number tells another pilot what the absence actually covered.

**SAME POSITION • SAME CONTACTS • DIFFERENT SCAN VOLUME**


---

FILTER AND TIMESTAMP STILL BOUND THE OBSERVATION

**Figure AFH-B1-FIG-011 — Every Directional Scan has a volume.** Position, camera direction, range and angle define the geometry. A narrower cone adds directional meaning by giving up coverage; objects outside the configured volume remain untested by that scan.

## Filters Define Results

The scanner does not place every detectable object into every result.

Its selected filter determines which object types are shown. Filters can use Overview presets, and an active Overview view may exclude precisely the object the Pathfinder meant to watch. The scanner uses type membership for this purpose; Overview state rules do not add hidden state knowledge to the scan.

This makes a clean result conditional twice: the object must be detectable, and the chosen filter must allow its type.

A specialised filter can reduce noise during a specific question. A ship-and-probe view can make a new contact easier to notice than a list filled with structures and celestial objects. The same filter is poor evidence for the absence of deployables or other omitted types.

Before trusting silence, name the filter's purpose. If the question changes, the filter may need to change with it.

The useful habit is not leaving everything visible forever. It is knowing what the present list has been allowed to hide.

## **Broad Before Narrow**

Narrow scans feel precise. Precision without an initial direction can become tunnel vision.

A broad scan first asks what detectable evidence surrounds the ship. Its result can identify contacts worth isolating and prevent attention from settling on one attractive celestial while activity occurs elsewhere.

Narrowing then becomes a reasoned change:

- isolate one contact from several;
- test whether a result lies near a known direction;
- separate overlapping celestial lines; or
- reduce a wide warning into a more useful area.

The order is not a ritual. If the Pathfinder already has a specific report to verify, a narrow question may be appropriate first. What matters is that the pilot understands which space was deliberately excluded.

After narrow work, return to breadth when the operational question becomes general again. A hunter, route or probe set outside the narrow cone has not stopped existing because the current result looks clean.

Coverage and precision are different resources. Spend each on the question it can answer.

## **Narrow With Purpose**

Each narrowing should remove a known ambiguity.

When a ship remains at a smaller angle aimed towards a planet, the direction has become more constrained. If several celestials share that line, the result still cannot establish which one contains the ship. If the

contact disappears after a slight camera movement, it may lie near the edge of the earlier cone or may simply have moved.

This is where the Solar System map and visible scan cone help. They let the Pathfinder see the relationship between the ship, the selected direction and candidate locations instead of relying on the apparent centre of the screen.

Do not narrow merely until the number looks impressive. Stop when the result supports the decision.

A Pathfinder checking whether a Wormhole is being watched may need to distinguish the connection's direction from nearby celestial lines. A pilot deciding whether to remain at a site may only need to know that an unfamiliar ship is somewhere in the surrounding volume.

The appropriate resolution belongs to the consequence, not to the scanner's smallest available angle.

## **Distance by Exclusion**

No object distance appears in a Directional Scan result. Range changes can still place boundaries around a contact.

Assume a ship is returned at a longer range. The Pathfinder shortens the range, keeps the direction and filter constant, then refreshes. If the ship no longer appears, it was not returned inside the shorter volume at that later moment.

The useful statement is:

*The contact was inside the longer scan and outside the shorter scan across these two measurements.*

That is stronger than *somewhere in system* and weaker than a coordinate. Movement is the principal uncertainty. A fast or warping ship can cross the boundary while the pilot changes settings. Camera drift, angle changes and filter changes add further ambiguity. Change one variable at a time when the distinction matters.

Range bracketing can support a warning, help separate candidate locations or decide whether another observation point is needed. It cannot create a Warp Destination where none exists.

Directional information remains an area of possibility until another tool or known object supplies a usable location.

## **Read the Result**

The result list reports object names and types. No pilot identity, exact distance, coordinates, activity state or intention accompanies a ship.

These omissions matter immediately.

A combat-capable hull is not proof of hostile action. An exploration hull is not proof of harmlessness. A familiar ship name may be deliberate misdirection. A Structure on scan does not reveal its full state merely by appearing.

Context can support Derived conclusions. A ship appears, Combat Scanner Probes soon follow and both persist near the direction of the Pathfinder's site. That sequence can justify increased concern and a more reversible action. It still does not disclose the pilot's mind.

Read changes as carefully as objects. A cluster of probes spreading and contracting suggests active Scanning. Wrecks beside ships may indicate recent combat or site activity. A contact vanishing at the same moment a new contact appears may be related, or may be coincidence.

The list provides facts. The sequence provides structure. Neither provides certainty beyond the instrument.

## **What Stays Hidden**

Some objects are outside the Directional Scanner's detection model.

Cloaked ships do not appear. Combat Recon Ships are also excluded from Directional Scan results. Cosmic Signatures, Cosmic Anomalies,

ordinary Bookmarks and normal NPCs are not discovered by this instrument.

Other objects may be detectable in principle but absent from the current result because of range, angle or filter.

These are different kinds of absence. The first comes from the scanner's rules. The second comes from the configured volume. The third comes from the present display choice.

The Pathfinder does not need to memorise an exhaustive object catalogue before using the tool. The pilot does need to reject the sentence *D-Scan is clear, therefore nothing is there*.

A clean scan can support action when its blind areas are acceptable for that action. A cloaked scout may continue gathering low-commitment information. An exposed ship may decide that the same Unknowns are too costly.

The instrument's blind areas do not make every contact equally likely. They set the ceiling on what absence can prove.

## Probes Mean Possibility

Core and Combat Scanner Probes can appear on the Directional Scanner when they are detectable within the configured volume.

Their presence is evidence of Scanning. Their absence is not evidence that no one is scanning: the probes may be outside the volume, excluded by the filter or between observed positions.

The probe type changes the range of plausible purposes. Core Scanner Probes are used to resolve Cosmic Signatures. Combat Scanner Probes can also be used to find ships and other eligible targets. Neither result identifies the operator or proves the target.

Treat the sequence as information:

- When did the probes first appear?
- Did their pattern or count change?

- Did a ship appear before or after them?
- Is the Pathfinder at a location another pilot would need to scan?
- Which action becomes difficult to reverse if the probes are relevant?

A good response may be to reduce exposure, change position, warn the group or continue observing. The decision depends on ship, purpose and available exit.

Probes are not a verdict of attack. They are evidence that another set of questions may be moving through the system.

## **Movement Changes Geometry**

The scanner's origin moves with the ship.

Warping to another point does more than bring new Grids into reach. It changes which parts of the system fall within range and how directions overlap. A contact absent from one position may appear from another without having moved at all.

Camera movement changes the direction of a narrow cone. Ship movement changes its origin. Range and angle change its volume. Filter changes its eligible contents. Time changes the scene.

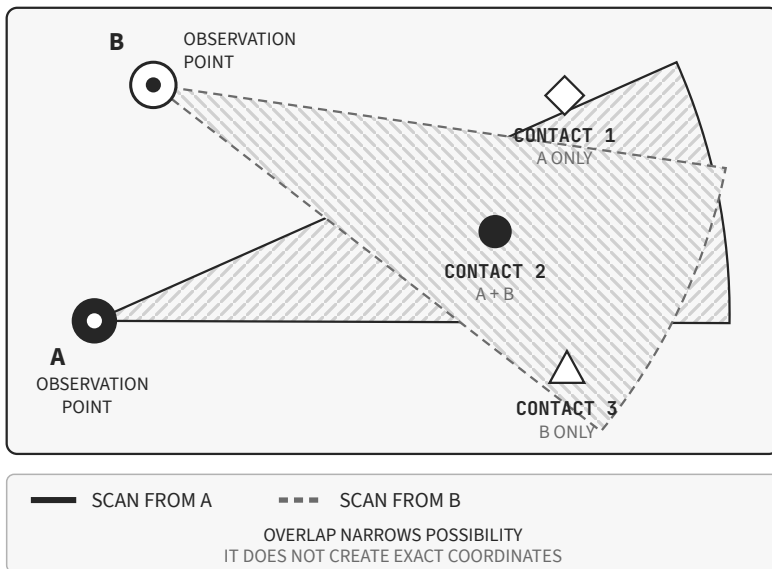
These variables explain why two pilots can make different, accurate reports from the same system.

Do not settle disagreement by choosing the newer or more confident voice. Compare positions, times and settings. One pilot may be beyond range of the contact. Another may be looking through a filter that includes it. The contact may have moved between scans.

Multiple observation points can create useful coverage, but they do not merge automatically. Shared awareness requires each report to preserve the geometry that produced it.

The system did not contradict itself. The measurements looked through different windows.

## MOVE THE ORIGIN · CHANGE THE EVIDENCE



**Figure AFH-B1-FIG-012 — Movement changes the origin of a Directional Scan.** Comparing snapshots from two Observation Points separates contacts seen from one position from contacts supported by both.

## Build a Rhythm

Directional Scanning becomes survival work when it continues alongside the task rather than preceding it once.

Begin with a baseline suited to the current position. Refresh when entering a new system, arriving at a new working Grid, changing exposure or receiving a report that alters the question. During an extended task, scan often enough that a new contact can still change the decision.

No universal interval can guarantee this. The appropriate rhythm depends on how quickly the ship can leave, how visible it is, what it risks and which approaches the current volume covers.



Attention also has limits. A pilot absorbed by Scanning can neglect the Grid, the Probe Scanner, Wormhole state or the actual task. The rhythm should move between instruments:

Observe the Grid. Refresh the intended Directional Scan. Compare the result with the baseline. Record or report meaningful change. Return attention to the operation.

The point is not constant clicking. Keep the picture younger than the time needed to act upon it.

## Report the Scan

*D-Scan clear* is usually too small a report.

At minimum, another decision may need the observing position, time, range, angle and filter purpose. A contact report also needs the returned ship or object types and whether the result persisted through another measurement.

Useful wording separates result from conclusion:

*14:22, inbound Wormhole: broad scan at displayed maximum range, ship-and-probe filter. One Stratos and eight Combat Scanner Probes returned. Direction not yet narrowed.*

No claim joins the Stratos to the probes or assigns hostile intent to either. The report instead gives the group enough evidence to decide what to verify next.

For a negative result:

*14:24, same position and settings: no ships or probes returned. Far side of system remains outside range.*

This preserves the change without declaring the contact gone from the system.

A Directional Scan becomes shared intelligence only when its geometry and age survive the person who pressed Scan.

## Field Principle

Each Directional Scan returns a manual snapshot of eligible objects inside a configured volume. Range, angle, camera direction, filter, position and time all define what that snapshot can mean.

Scan broadly to establish context, narrow to answer a reasoned question and report the settings that bound the result. Absence is evidence about the measurement, never proof that the system is empty.

# Chapter 11 - Polarization

The Pathfinder retreats through the Wormhole and reaches the familiar side. The danger appears to be behind the ship.

Two minutes later, the situation changes. The pilot attempts to return through the same connection. The Wormhole refuses the transit.

The connection still exists. Its mass state still supports the hull. The short Session Change ended long ago. What blocks the ship is a history created by the pilot's own earlier movement.

Polarization makes a Wormhole remember direction. Understanding that memory means replacing the idea of *two quick jumps* with two separate clocks.

## Two Directional Clocks

For a particular pilot and Wormhole connection, each direction keeps its own five-minute transit history.

Call the systems A and B. A transit from A to B begins the A-to-B clock for that pilot on that connection. The pilot can return from B to A after the Session Change because that return is the first transit in the opposite direction. It begins a separate B-to-A clock.

The clocks do not cancel one another.

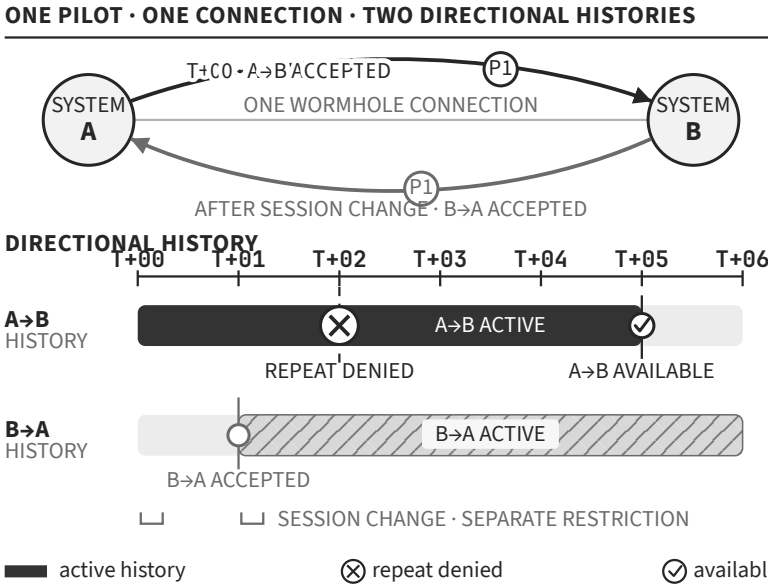
After the pilot reaches A, an immediate attempt from A to B meets the first A-to-B history while it is still active. The Wormhole refuses that same-direction repeat until five minutes have passed from the earlier transit.

For that reason, *I jumped twice* is an unreliable summary. The relevant record is:

- which pilot;
- which Wormhole;
- which direction; and

- what time the last successful transit in that direction occurred.

Polarization is not a property of the side on which the ship waits. Instead, it relates the pilot's transit history to the next direction being attempted.



**Figure AFH-B1-FIG-013 — Polarization keeps two directional histories.** For one pilot and one Wormhole Connection, A→B and B→A retain separate five-minute histories. A successful return in the opposite direction does not clear the first direction.

## First Transit

The first transit through a connection in a direction usually feels unrestricted because no recent same-direction crossing exists to block it.

That success creates the condition for a later refusal.

Suppose the Pathfinder crosses A to B at 12:00. The ship arrives in B. The A-to-B direction will not accept another transit by that pilot until 12:05. This restriction matters even though the ship is presently on the B side and cannot immediately attempt A to B.

The hidden relevance appears after a return.

At 12:01, the pilot travels B to A. That movement is allowed because it is the first B-to-A transit in the period. It begins a B-to-A history lasting until 12:06. The ship is now back in A with both directions carrying different times.

Nothing about the arrival display says the route has reset. Physically returning to the starting system does not return the pilot to the starting state.

Record the first transit because it is the beginning of future constraint, not because it caused a problem at the time.

## The Third Jump

At 12:02, the Pathfinder attempts A to B again.

The connection is present. The hull may fit. Sufficient mass capacity may remain. The ten-second Session Change has ended. The jump still fails because the pilot already travelled A to B at 12:00.

At 12:05, the A-to-B direction becomes available. A successful transit then starts a new A-to-B five-minute history.

The other clock has not followed it. On arrival in B at 12:05, the B-to-A direction still reflects the transit made at 12:01 and remains unavailable until 12:06.

One minute can now separate the pilot from a return that looked immediate.

This sequence is the simplest reliable model:

- 12:00 — A to B succeeds; A-to-B available again at 12:05.
- 12:01 — B to A succeeds; B-to-A available again at 12:06.
- 12:02 — A to B is refused.
- 12:05 — A to B succeeds and begins a new A-to-B history.
- 12:06 — B to A becomes available from its own earlier transit.

The exact clock times will vary. The separation between directions does not.

## **Read the Refusal**

When Polarization blocks a transit, the client reports the refusal and can show the remaining restriction.

That message is valuable evidence. It distinguishes Polarization from a collapsed connection, ship-size limit, Session Change or another suspected cause. It also gives the pilot a present boundary for the attempted direction.

The message arrives after the pilot has already depended upon the jump. For that reason, refusal should not be the normal method of discovering the timer. A ship testing the Wormhole under pressure may be exposed on the Grid while the expected exit is unavailable. A fleet may split when some pilots cross and others learn their histories are different.

Use the client indication to correct the record. Do not use it as permission to forget the earlier transits.

If an expected time and the displayed restriction disagree, trust the current client state for the immediate decision and mark the manual record uncertain. Tracking exists to anticipate the mechanic, not to argue with the server.

## **Pilot, Not Ship**

Polarization applies to the pilot rather than to the hull or account as a single shared state.

Changing ships does not clear that pilot's history through the connection. A different pilot using the same hull carries their own history instead.

This distinction prevents a dangerous repair attempt. When a jump fails, the Pathfinder may suspect the ship and consider swapping hulls. A pilot Polarized in that direction gains nothing from a new hull.

It also explains why two pilots arriving together may receive different answers from the same Wormhole. Their ships can be identical, and their connection state can be shared, while their personal transit histories differ.

Fleet reports should therefore avoid *the hole is Polarized*. The connection does not impose one universal clock upon everyone.

Say who is affected and in which direction:

*Pathfinder One: A-to-B available at 12:05. Pathfinder Two has no recorded A-to-B transit.*

The grammar matters because the mechanic belongs to the subject.

## Connection Specific

The directional history belongs to the particular Wormhole used.

A pilot blocked from A to B through one connection is not thereby blocked from using every other Wormhole in the system. Another available edge carries its own transit history and its own mass and lifetime conditions.

This does not automatically make the alternative safe. It may lead somewhere else, lack usable endpoint Bookmarks or depend on an older report. It may lengthen the Chain or expose the ship to another Grid.

Still, the distinction matters during recovery. *The return is blocked* may mean *this pilot cannot presently take this direction through this connection*. That statement does not necessarily mean the system has no route.

Maps should keep connection identity precise enough for timers to attach to the correct edge. A vague label such as `home hole` becomes risky when a replacement connection appears or the Chain has several routes towards Home.

Polarization depends on identity. If the record cannot distinguish the Wormhole, it cannot preserve the clock.

## Session Change

The ten-second Session Change after a Wormhole jump and the five-minute directional history are separate mechanics.

Session Change creates a short restriction immediately after each transit. It can prevent the first return even though that opposite direction has no recent history. Once the Session Change ends, the return may succeed and begin the second directional clock.

Polarization becomes relevant when a pilot attempts the same direction again within its five-minute window.

The timescales make confusion easy. A pilot waits until another jump command becomes available, returns successfully and concludes that all restrictions ended. Only the short one ended. The original direction can remain blocked for several more minutes.

Keep the concepts separate in reports:

- *Session Change active* describes the immediate post-transit state.
- *A-to-B Polarization until 12:05* describes directional history.

Both can affect movement. They answer different questions and expire on different schedules.

## Mass Is Separate

Polarization does not describe the Wormhole's remaining capacity.

The pilot may be clear to travel while the connection can no longer support the ship or collapses. The Wormhole can remain healthy while that pilot is Polarized. A successful transit affects mass state and starts directional history at the same time, but those consequences are not the same mechanism.

This separation matters when planning a return.



Waiting for Polarization to end spends connection lifetime and allows other traffic to consume mass. Confirming the timer does not preserve the door. Rechecking the Wormhole state does not clear the pilot.

Before depending on a transit, the Pathfinder needs both answers:

*Can this connection still carry the ship?*

*Can this pilot travel in this direction now?*

The first is about the Wormhole and hull. The latter concerns the pilot's history.

A plan that records only one can fail despite being correct about it.

## **Fleets Desynchronise**

A group rarely shares identical clocks for long.

The scout may have crossed the connection earlier. Another pilot may have joined from the far side. A third may have returned during a warning while the others stayed. When the Fleet Commander later calls for movement, the pilots stand on the same Grid with different directional histories.

The Wormhole can therefore divide the group without changing visibly. Before coordinated movement, pilots whose recent transits matter should report them. The report needs connection, direction and time. Silence should not be interpreted as clear history unless the group has established that meaning.

When the fleet must cross under pressure, verify the movement in stages. A successful first transit does not prove the remaining pilots can follow. A failed transit should be reported immediately with the affected pilot and remaining time, not merely as *can't jump*.

Shared timing creates options. The group can wait, change order, use another route or abandon a commitment before the first ships cross.

Unshared timing turns a mechanical restriction into a surprise at the threshold.

## Escape Can Fail

Polarization becomes most dangerous when a route is treated as an unconditional escape.

A pilot crosses to inspect the far side, returns after seeing a threat and later moves back towards the Wormhole expecting to flee through it again. The object is visible. The Bookmark is correct. The Wormhole has not collapsed. The intended direction is still unavailable.

The failure began at the earlier transit, not at the moment of pursuit.

Every escape plan through a recently used Wormhole should include time. If the direction may be blocked, the pilot needs either enough room to wait, another route, another position or a decision not to enter the exposure at all.

The threat does not need to know the exact timer to exploit it. Pressure near the connection can force the pilot to attempt the unavailable direction. Experienced opponents may also infer likely histories from observed traffic.

An exit Bookmark preserves where the door is. Polarization tracking preserves whether this pilot can use it in the intended direction.

Neither replaces the other.

## Record Each Transit

The smallest useful record is a successful transit with pilot, connection, direction and time.

Connection notes can live on the Shared Map. An operational timeline can hold fleet movement. A solo Pathfinder may use visible client time-stamps or a compact field note. The tool matters less than whether the next decision can recover the history.

A directional label should be unambiguous from the current map. Home to Chain and Chain to Home can work when both endpoints are stable and shared. System identifiers are safer when aliases may change.

Do not record only the expected expiry. Record the transit that produced it. If the clocks later disagree, the group can reconstruct the reasoning. An expiry without its Source looks authoritative even after the wrong edge was selected.

Failed attempts should not be mistaken for successful transits. Record the refusal when it affects the operation, but do not let it replace the last known crossing in that direction.

Time is not paperwork added to movement. For Polarization, time is part of the route.

## **Wait With Purpose**

Sometimes the correct decision is simply to wait.

Waiting for a directional history to expire can restore the intended transit. The rest of the system does not freeze. The connection continues to age. Other ships can cross. The local Grid can change. The pilot's position may be observed.

Choose the waiting position with those facts in mind.

The safest available place depends on ship, cloak, Grid, known contacts and route. This chapter cannot provide one universal position. It can provide the question:

*What can change during this interval, and which of those changes would make the planned transit unacceptable even after the clock clears?*

Use the interval to refresh the relevant picture. Recheck Directional Scanner evidence. Watch the Wormhole state if it remains observable. Confirm the alternative route and tell the group when the intended direction becomes available.

Waiting is an action when it protects a later choice. It becomes drift when the pilot watches the timer and allows every other condition to age unseen.

## Rebuild the Picture

The end of Polarization answers one question: the pilot is no longer blocked by that directional history.

A cleared clock confirms neither the far Grid, the Wormhole's capacity, the destination, the Shared Map nor the presence of other pilots. Those observations may be five minutes older than they were when the wait began.

Before transit, rebuild the smallest picture the commitment requires.

Confirm the connection identity. Read its current Information if condition matters. Refresh the Directional Scanner with settings suited to the Grid. Check whether the route beyond the Wormhole is still the route the plan expects. Preserve any new Unknown instead of letting the cleared clock stand in for all of them.

Then decide again.

Polarization teaches a broader survival lesson. A single action can leave behind state that is invisible in the ship's present position. That state must travel forward until it expires or is replaced by a new Observation.

The timer may be over. The world that elapsed alongside it is not.

## Field Principle

Polarization is a five-minute same-direction restriction belonging to one pilot on one Wormhole connection. The opposite direction keeps its own history. Returning does not reset the first clock.

Record every relevant transit by pilot, connection, direction and time. Keep Polarization separate from Session Change and Wormhole mass. Before depending on the next jump, confirm both the pilot's history and the door's current state.

# Chapter 12 - Environmental Effects

The fit was tested before departure. Its capacitor was stable enough for the planned work. Its defences had known limits. The Pathfinder understood how quickly it could align and what its weapons could apply.

After transit, the same ship tells a different story.

One defensive layer has grown. Another has weakened. The capacitor behaves differently, and a familiar module no longer produces the expected result. Nothing has been damaged. The system itself is changing the ship.

Environmental Effects are not scenery, and they are not a label to add after the route has been planned. They alter the conditions under which every capsuleer ship in that system performs. A fit that was suitable outside may become stronger in one respect, weaker in another and tactically unfamiliar in both.

Complete matrix memorisation is unnecessary before entry. The pilot does need to recognise the Effect, identify which assumptions it changes and refuse to treat a bonus as a general promise of safety.

## The System Acts

Some Wormhole Space systems contain a secondary stellar phenomenon whose Effect modifies ship attributes and modules throughout the system.

The official Static Data Export identifies six Effect Types: Magnetar, Pulsar, Black Hole, Cataclysmic Variable, Red Giant and Wolf-Rayet. The same Type can appear across different ordinary Wormhole Classes.

The Effect belongs to the system, not to the Wormhole used to enter it. Every current connection into that system leads into the same modified

environment. Leaving through any connection ends those system conditions and replaces them with whatever applies on the far side.

This makes the Effect stable context for the visit. Unlike a Directional Scan result, it does not age, but the record still needs a reliable Source. Misidentifying the system or copying an incorrect map entry can apply the wrong assumptions to every ship that follows.

Read the Effect as part of system identity:

*System confirmed. Class confirmed. Effect confirmed. Present contacts still Unknown.*

The Effect changes performance without disclosing who may exploit that change.

## Class Sets Strength

Effect Type and Effect strength are separate pieces of information.

In ordinary C1 to C6 systems, the same Effect grows stronger with the Class. A Pulsar remains a Pulsar, but its modifications do not have the same magnitude in every Class. The official data represents this through an Effect Beacon tied to both the Effect and the Class.

This is why an Effect name alone is incomplete.

*Magnetar* identifies the direction of the changes: more raw damage alongside poorer application and targeting conditions. The Class determines how far those changes reach. A fit judged from the Effect name without its strength can still be badly misjudged.

Special System Types can require separate checking. Do not force their behaviour into an ordinary C-Class rule merely because the visible Effect name is familiar.

Do not reconstruct exact percentages from memory. Current attributes, current data and a suitable fitting tool can provide the values when a decision requires them. The field skill comes first: recognise which

performance axes have moved and test whether the operation depends upon them.

## Read the Change

The client can display the active Wormhole Effect among the ship's current effects. The ship and module attributes then reveal what those conditions mean for the fitted hull.

Begin with dependencies rather than the full attribute list.

If survival depends on shield capacity, inspect shield changes. Where the route depends on a quick align, inspect movement and inertia. A ship relying on local repair needs its local repair performance examined. When the plan expects weapons to apply to small targets, raw damage is only part of the answer.

This approach prevents an Effect from becoming trivia.

A Pathfinder may record:

- the confirmed Effect Type and system Class;
- the Source used to identify them;
- the ship functions materially changed;
- which earlier fit assumptions no longer hold; and
- what must be tested before greater commitment.

The result serves as an operational warning, not as a replacement fitting guide.

*C4 Black Hole: movement, inertia and web assumptions changed; present hull not yet evaluated for the route.*

That note tells the next pilot what the Effect means before claiming whether the ship is good or bad.

## Bonuses Carry Costs

Every Effect creates advantage and disadvantage together.

A bonus may improve the strongest part of a fit while exposing a different weakness. It may help the Pathfinder and any hostile capsuleer using the same environment. It may strengthen a module without improving the decision in which that module is used.

Raw damage does not guarantee good application. More shield capacity does not repair weakened armour resistance. Greater ship velocity does not promise a shorter align when inertia also changes. Stronger remote repair does not help a solo ship whose local repair is reduced.

The word *bonus* is therefore too small for operational use. Ask:

- which attribute changes;
- which ship function depends upon it;
- what linked penalty moves at the same time;
- who else receives the same opportunity; and
- whether the present plan can still be reversed.

Environmental Effects reward preparation because they make specialised choices more powerful. They punish shorthand because the most visible benefit can hide the condition that actually decides the outcome.

## **Pulsar**

A Pulsar favours shield capacity and capacitor recharge while enlarging ship Signature Radius. It also reduces armour resistances and strengthens Energy Neutralizer and Nosferatu drain amounts.

The immediate attraction is obvious: a shield-focused ship may display a much larger defensive buffer, and capacitor recharge can improve. The larger Signature Radius also makes the ship easier for weapons and sensors to interact with. An armour fit pays a direct resistance cost.

Those changes do not produce one universal winner.

A shield ship can gain endurance while becoming easier to hit. A capacitor plan can improve while hostile capacitor warfare becomes stronger.



An armour ship that was comfortable outside the system can enter with a defence that no longer matches the calculation made before transit.

Record the dependency, not merely the theme:

*Pulsar present. Shield and capacitor assumptions revised; armour resistance, Signature Radius and capacitor warfare also changed.*

The system favours certain preparations; preparation of the ship still belongs to the pilot.

## Black Hole

A Black Hole increases ship velocity, missile velocity, missile application through Explosion Velocity and Targeting Range. It also increases inertia and reduces Stasis Webifier strength.

The ship can move faster without becoming more agile.

That distinction changes navigation. Higher maximum velocity may lengthen the distance covered during movement, but increased inertia can slow acceleration, turning and alignment. A route planned around a familiar time to enter Warp may therefore behave differently even while the velocity display looks impressive.

Weaker Webifier strength changes both escape and control. One consequence is a ship that can be harder to hold with webs while its own web is less able to control another ship. Missile and targeting advantages also apply to other capsuleers in the system.

Do not compress the Effect into *speed bonus*.

A useful reading is:

*Black Hole present. Speed, alignment, missile application, targeting and web control must be judged together.*

The environment increases motion without deciding who controls it.

## Cataclysmic Variable

A Cataclysmic Variable strengthens remote armour repair and shield transfer while reducing local armour and shield repair. It increases capacitor capacity, lengthens capacitor recharge time and reduces remote capacitor transfer.

The Effect separates self-sufficiency from group support.

A fleet built around remote repair may gain substantial repair output. A solo ship depending on its own repair module loses strength. Logistics that assume remote capacitor transfer works as it did elsewhere must also reconsider the Chain that keeps those repairs active.

Greater capacitor capacity and a longer recharge time pull in different directions. The resulting performance depends on the ship, fit and operating point. Inspect current values rather than deciding from one modified attribute.

For a first expedition, the practical question is simple:

*Does this ship rely on local repair to remain, and has that repair been re-evaluated here?*

If not, the ship has crossed into an environment that weakens its principal recovery method. A possible fleet advantage does not repair a solo planning error.

## Magnetar

A Magnetar increases raw weapon damage while making several forms of damage application and targeting less forgiving.

Current Effects reduce turret and drone Tracking, shorten Targeting Range, weaken Target Painter strength and enlarge missile Explosion Radius. The damage number rises, but the ability to place that damage onto a moving or small target can fall.

This creates a seductive display. A pilot sees greater theoretical output and assumes every engagement will end faster. Against a target the

weapons apply poorly to, the new number may not produce the expected result. Against a well-matched target, the same bonus can make mistakes end very quickly.

Other capsuleers receive that damage environment too.

Treat a Magnetar as compression of time and margin, not a general advantage. Verify range and application. Consider how quickly an unexpected contact can change the Grid. The fitting window's headline number cannot replace the geometry of the encounter.

More damage increases consequence, not understanding.

## **Red Giant**

A Red Giant intensifies Overload benefits and Heat Damage. It also increases Smartbomb range and damage, as well as Bomb damage.

Overheating becomes more powerful and more costly.

A module can provide a stronger temporary result, but it also accumulates more Heat Damage. The familiar judgement about how long a module can remain overloaded no longer carries across unchanged. Remembering only the improved bonus can burn out the function the escape depends upon.

The Smartbomb and Bomb changes matter even to a Pathfinder who does not fit either weapon. Another ship may use the environment. Distances and damage that felt tolerable elsewhere deserve a fresh reading.

Red Giant systems reward pilots who understand temporary performance and module health. They punish the idea that Overload is free reserve power.

Record what the operation may need to overheat and which failure would follow if that module burns out. The Effect does not require the Pathfinder to use the advantage. It requires the Pathfinder to stop using old heat expectations without checking them.

## Wolf-Rayet

A Wolf-Rayet increases armour Hitpoints and small-weapon damage. It reduces shield resistances and ship Signature Radius.

The Effect favours smaller weapon systems and makes ships harder for larger weapons to apply to through the reduced Signature Radius. Armour buffers grow, while shield resistance weakens.

Once again, the visible benefit is not the whole engagement.

A small Pathfinder hull may enjoy the signature change while carrying a shield defence that has lost resistance. A larger hull can gain armour Hitpoints without benefiting from the small-weapon bonus it first associated with the system. A hostile small-weapon ship can exploit the same conditions.

Do not use *good for small ships* as a complete assessment. Read the fitted defensive layer, weapon size, expected targets and actual Class strength.

Wolf-Rayet changes scale. It makes the relationship between hull size, weapon size, Signature Radius and defensive layer more important than the category name alone.

ENVIRONMENTAL EFFECTS · QUALITATIVE FIELD MATRIX

TYPE SETS THE PATTERN

CLASS SETS THE MAGNITUDE

| EFFECT                                           | STRENGTHENS                                                        | WEAKENS / COSTS                                                                       |
|--------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>PULSAR</b><br>shield + capacitor              | Shield capacity<br>Capacitor recharge<br>Energy drain amount       | Armor resistances<br>Signature radius grows<br>different exposure<br>not pure defence |
| <b>BLACK HOLE</b><br>speed + missiles            | Ship velocity<br>Missile velocity<br>Targeting range               | Inertia rises<br>Webifier strength<br>fast does not mean<br>quick to align            |
| <b>CATAclysmic VARIABLE</b><br>remote over local | Remote repair<br>Shield transfer<br>Capacitor capacity             | Local repair<br>Capacitor recharge time<br>Remote capacitor transfer                  |
| <b>MAGNETAR</b><br>damage +<br>application cost  | Raw damage<br>large increase<br>fit-dependent result               | Turret / drone tracking<br>Targeting range<br>Missile application                     |
| <b>RED GIANT</b><br>overheat + area<br>weapons   | Overload bonus<br>Smartbomb range / damage<br>Bomb damage          | Heat damage rises<br>more output · faster module risk                                 |
| <b>WOLF-RAYET</b><br>armor + small<br>weapons    | Armor hitpoints<br>Small weapon damage<br>Signature radius shrinks | Shield resistances<br>effect differs by defence choice                                |

COMPARE THE FUNCTION YOUR PLAN DEPENDS ON

No percentage values are shown. Confirm the current client or data source before fitting.

SYSTEM-WIDE DOES NOT MEAN EQUAL CONSEQUENCE

**Figure AFH-B1-FIG-014 — Environmental Effects change functions, not outcomes.**  
Each Effect Type has a qualitative pattern of strengths and costs; Wormhole Class controls magnitude. Confirm current values before fitting.

## Unequal Participants

Current sources distinguish capsuleer ships from other participants in the system. The Effects modify capsuleer ships; current community documentation states that Sleepers and Structures do not receive those changes. Official Upwell documentation separately confirms that Structure modules and fighters are unaffected by Wormhole Effects.

This asymmetry matters.

A capsuleer ship's damage or defence may change while the Sleeper it faces does not receive the same modifier. A Structure visible in a Pulsar does not inherit the ship bonus merely because it occupies the same system. A pilot cannot safely infer NPC or Structure performance from the altered attributes of the ship.

The boundary should remain explicit in a report:

*Effect confirmed for capsuleer ships. Do not project the modified ship values onto Sleepers or Structures.*

Special entities and future changes still require current verification. The principle is not to guess symmetry. Read which object the mechanic actually affects.

## Refit the Decision

Crossing into an Effect system does not automatically demand a new hull. It demands a new decision.

Available responses include continuing, changing the fit, reducing the planned exposure, requesting a different ship or declining the system. The correct choice depends on which functions changed and how much the operation needs them.

Before committing, compare three pictures:

- the ship as prepared outside the system;
- the ship as it performs under the current Effect; and

- the opposing use another capsuleer could make of the same conditions.

When the difference matters, update the field record and the Shared Map. A pilot following later should see the Effect before crossing with a fit built on incompatible assumptions.

Do not describe the system as *bad* because it weakens the current ship. Do not describe it as *good* because it strengthens one number. State the changed conditions and the decision they support.

The environment has no allegiance.

## Field Principle

System-wide Effects change capsuleer ship performance. The Type identifies the pattern; the Class determines its ordinary strength.

Read every bonus with its linked penalties. Inspect the functions the operation depends upon, record which assumptions changed and remember that other capsuleers receive the same environment.





# Chapter 13 - Common Threats

The Directional Scanner shows no ship. Local has disclosed no speaker. The route Home is mapped, and the Pathfinder has already crossed its first two connections without incident.

At the next Wormhole, the ship lands away from the expected point inside a Warp Disruption Field. A contact decloaks. The return direction is still Polarized.

No single instrument failed.

The threat existed in the relationship between an unseen pilot, a constrained landing, a recent transit and a route treated as immediate escape. Each part was survivable alone. Together, they removed the easy answer.

Common threats in Anoikis are rarely just a list of hostile objects. They are conditions that take away time, information or reversibility. The central task is recognising when those conditions begin to combine.

## Threat Is Change

A ship type is not a threat by definition. A change that can interfere with the plan is operationally more useful to notice.

New probes appear. A connection changes mass state. A Wormhole activates on Grid. A known ship vanishes from the Directional Scanner. A route report ages past the commitment it was meant to support.

Each change creates a question before it creates a conclusion.

The Pathfinder should ask:

- What changed from the baseline?
- Which action could the change interfere with?
- How soon would that interference matter?
- What remains reversible now?
- Which observation could distinguish the plausible explanations?

This prevents the two familiar extremes. Dismissing every change allows pressure to build unnoticed. Treating every change as an attack spends attention and movement on stories the evidence never supported.

A threat picture is a set of capabilities and opportunities, not a claim about intention. It becomes urgent when capability, position and the Pathfinder's exposure begin to align.

## Silent Pilots

Chapter 9 established the limit: silent pilots cannot be counted through Local. Threat assessment adds a different question. What opportunity would an unseen pilot have against the present action?

Probes, Wormhole activation, unexplained ships, changed connection state or wrecks can narrow that question without identifying a hunter. None proves hostility. Together they may justify less exposure.

Do not defeat silence by inventing a location. Decide which actions remain reasonable if another pilot is watching. Sometimes movement preserves options; sometimes holding and refreshing the picture reveals less.

## Wormhole Grids

A Wormhole Grid concentrates movement.

Pilots who want to observe or control traffic know that arriving ships must appear near the connection and that returning ships must come back to it. The Grid can therefore contain a scout, tackle, Warp Disruption Field or ships waiting beyond Directional Scanner range before being called in.

Post-jump protection gives the arriving Pathfinder time to observe. It does not make the Grid neutral. A ship command ends that protection, and the next action can reveal which route the pilot intends to take.

Before ending the pause, read more than visible hulls:

- the return Wormhole and its distance;
- deployed objects and disruption fields;
- nearby objects that could interfere with cloaking;
- the ship's current Polarization and Session Change state;
- directions that remain available; and
- changes reported elsewhere in the Chain.

The first command should follow from this picture. Habitual movement gives an observer a predictable target.

A clear arrival Grid is encouraging but promises nothing about the far side of the next command.

## **Probes and Hunters**

Scanner Probes reveal capability before they reveal purpose.

Chapter 10 separated Core and Combat Scanner Probe capability from identity and intent. Under threat, the sequence now matters most. Probes appearing after work begins, changing position or remaining near the relevant volume deserve more attention than one isolated return.

A ship appearing afterwards can increase concern without proving a common operator. Disappearing Probes may have moved, been recalled or left the next configured scan.

Report the time, volume and change from the baseline. Identity need not be known before avoidable exposure is reduced, but one Core Scanner Probe need not drive a sound position into panic.

Hunting is a process of reducing uncertainty. The Pathfinder survives by noticing when someone else may be reducing it too.

## **Warp Disruption**

Warp Disruption Fields can prevent ships inside them from entering Warp and can alter the endpoint of a Warp towards a prepared field. They may be created by deployable structures or specialised ships.

The threat lies not only in the field, but also in the place where it causes the ship to stop.

A displaced landing can put the Pathfinder away from a Wormhole, beside objects that break a cloak or inside the reach of waiting tackle. A field on an otherwise familiar route can make an old Bookmark deliver the ship into a new situation.

Interdiction Nullifiers can protect eligible fitted ships from Warp Disrupt Probes and Mobile Warp Disruptors, but only under their current activation and fitting rules. Official guidance requires the module to be active before the Warp command. It also has a reactivation delay, and some fitted modules can prevent it from working.

Nullification is therefore capability, not immunity to every form of tackle. Read the module, the ship and the planned Warp before depending upon it.

The best time to notice a disruption risk is before the route has only one landing.

## Site Defenders

Wormhole Space may contain hostile Sleepers. A Site category, resolved position or attractive container does not establish that the Grid is safe for the current ship.

Site danger varies with the Site, system and activity. Some locations contain NPC defenders. Others can introduce hazards or spawn responses after a trigger. A complete Site catalogue belongs in specialised references rather than a beginner's memory.

The Pathfinder needs a firmer rule:

*Do not enter an unfamiliar Site as though Scanning it also evaluated it.*

Resolution provides location and identification, but cannot compare incoming damage, tackle, capacitor pressure or triggers with the fitted ship. Nor does it exclude another capsuleer already observing the Site.

Before entering, use a current Site reference and understand what causes the encounter to change. If that information is unavailable, record the Site and leave it uncommitted.

Curiosity is not the error. Turning an unknown encounter into an irreversible test is.

## **Changing Connections**

The route itself can become the threat.

A Wormhole ages and carries traffic while the ship works. No hostile intent is required; dependence on a temporary door creates the exposure.

Watch the edges that carry the greatest consequence. The only return to a critical system deserves fresher condition than an optional branch, even when all known traffic is friendly.

When the state worsens, ask what follows the current ship, what lies beyond the edge and what recovery remains after collapse. A route can stay technically open while becoming operationally poor.

## **Effect Mismatch**

Environmental Effects turn familiar performance into another source of risk.

A Black Hole can alter alignment assumptions, a Cataclysmic Variable local repair and a Wolf-Rayet shield resistance. The danger begins when a fit from another environment is trusted without revision.

Treat that mismatch like stale route information. Identify the function the operation depends upon and compare it with the current attributes. An earlier ship may have used a different defence, weapon size or support; a shared Effect still produces fit-specific consequences.

A threat does not have to be hidden. Sometimes it is displayed above the capacitor and ignored.

## Bad Information

Errors in a Shared Map do not require deceit.

An edge may have collapsed. A Bookmark may refer to the wrong end-point. A report may omit its filter. An automated mapping event may have inferred the wrong connection. A correct observation may simply be too old.

Bad information becomes dangerous when it looks complete enough to stop verification.

Preserve Source, Timestamp and disagreement. Mark an edge Unverified instead of forcing two Reports into one clean answer. *I think this is the inbound* is not a route state; confirm the object and relationship or leave them Unknown.

Shared trust grows when every pilot can see which parts have been checked and which next edge still needs testing.

## Human Overload

The pilot is part of the threat picture.

Ship control competes for attention with the Directional Scanner, Probe Scanner, Local and Overview. The map, communications and Wormhole state demand attention too. Under pressure, the mind tends to narrow around the most vivid signal and drop quiet dependencies.

A visible hostile ship can make the Pathfinder forget Polarization. A collapsing route can pull attention away from a new Grid contact. Repeated Scanning can continue while the filter is wrong.

Reduce this load before it peaks.

Use stable labels. Keep important windows readable. Decide stop conditions in advance. Report changes in a consistent form. Let another pilot own part of the observation when the group is available.

Perfect awareness is not the goal. Preserve the route, ship state and next reversible action so that one surprise cannot erase all three at once.

When the picture becomes too crowded to interpret, reducing commitment is a valid decision.

## Threats Combine

Threats gain force by removing different options together.

Polarization removes one immediate direction. A Warp Disruption Field removes Warp. A cloaked pilot removes warning. A weakened Wormhole removes confidence in the route. The local Effect changes the performance used to escape.

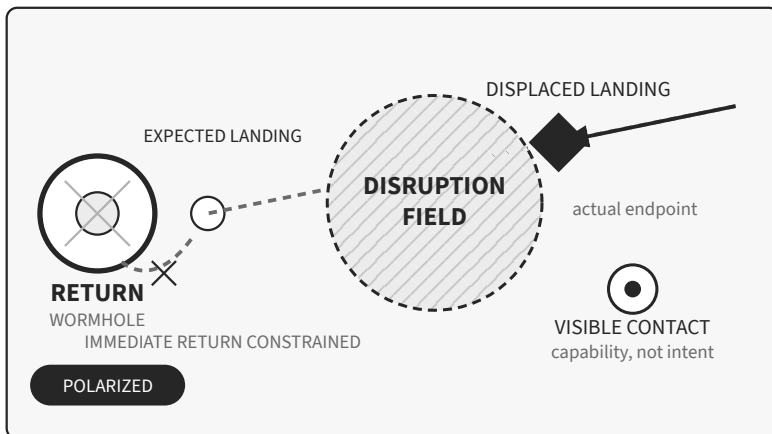
No checklist can predict every combination. A common framework can still expose them:

- **Contact:** What can act against the ship?
- **Position:** Where can that capability reach?
- **Constraint:** Which movement or system is already limited?
- **Time:** Which condition changes next?
- **Recovery:** What remains if the intended action fails?

The strongest warning is often not a dangerous object, but the discovery that two independent escape assumptions depend on the same fragile edge.

Before increasing exposure, find the single failure that would make several other problems irreversible. That is where another observation or different plan has the greatest value.

## CONTACT · POSITION · CONSTRAINT · TIME · RECOVERY



### NO SINGLE MARK EXPLAINS THE WHOLE THREAT

The danger is the combination: return constrained, landing altered, warp denied, contact present.  
Neutral geometry only · not a scale drawing of a client Grid.

**Figure AFH-B1-FIG-015 — Threats combine by removing different options.** A displaced landing changes position, a Disruption Field changes Warp, a visible contact changes exposure and Polarization constrains immediate return.

## Decide Early

A stop condition made before contact is easier to use during contact.

Pre-set stop conditions might include unexpected Combat Scanner Probes, an unverified return edge, a particular Wormhole state or loss of Scanning capability. The threshold should match the ship, purpose and support.

This is not cowardice encoded as procedure. It prevents sunk time from silently changing the accepted risk.

When the condition occurs, observe and report it. If the picture differs from the condition anticipated, a new decision may still be reasonable.



What should not happen is continuing by default because the ship has not yet been attacked.

Leaving early can preserve route knowledge and expose the threat to the next operation. Remaining can be correct when the ship retains control and the new information supports it.

Certainty is not required before action. The reason for acting must survive the surprise.

## Report the Threat

*Hostile in system* may be urgent, but it is often incomplete.

A useful report separates the observation from the assessment:

*14:42, return Wormhole Grid: Sabre visible, Warp Disruption Field active, two additional ships on broad scan. A-to-B Polarization remains for approximately one minute. Assessing Grid as hostile; do not jump.*

The visible ship and field are Observed. The additional contacts belong to a bounded scan. The timing comes from the pilot's history. *Hostile* is the operational assessment that follows.

If identity or intention remains Unknown, say so. When the connection state has not been rechecked, the threat report must not imply that the route is healthy.

Good reporting gives the group options. It can stop traffic, redirect a scout, protect an alternative route or reveal that another pilot has better information.

The report should make the next decision faster without pretending to remove its Unknowns.

## Field Principle

A threat is any condition that can remove information, time or reversibility from the operation. Ships, probes and Sleepers can all

contribute. Disruption fields, Effects, changing connections and human attention can do the same.

Build the picture from capability, position, constraint, time and recovery. Act before several small uncertainties become one irreversible event.

## Part IV - Operations

All pieces are now present. Observation, Scanning, entry, Bookmarks and mapping build the route picture. Silent-system awareness, Directional Scanning, Polarization and Environmental Effects add the conditions in which common threats must be read.

Operations begin when those pieces must work together for longer than a single decision. Information needs ownership. Routes need maintenance. Exposure needs a purpose and an end.

Part IV turns the field sequence into a repeatable expedition. The following pages move through the daily rhythm, the changing route Home and the point at which a Pathfinder is ready to continue learning without mistaking foundation for mastery.



# Chapter 14 - Daily Operations

The operation begins without drama.

A Pathfinder has a ship, a purpose and a connection into Anoikis. No threat report is active. An earlier check supports the route shown on the Shared Map. The available time appears generous.

This is where most operational discipline is won or lost.

Emergencies reveal habits created during quiet work. If the route was never given an owner, nobody knows whether its condition is current. If the stop condition was never discussed, time and profit slowly become reasons to continue. A complete-looking map may persuade the next pilot to stop testing it.

No single procedure defines a daily operation. Instead, daily work forms a controlled cycle that keeps purpose, exposure and return visible while the system changes.

## Start With Purpose

Define what the operation is meant to produce.

Possible purposes include opening a route, checking existing connections, surveying a branch, supporting another activity or carrying a ship Home. Each asks for a different level of Scanning and a different stopping point.

*Explore the Chain* is too broad to control exposure.

*Verify the current route from Home to Known Space, preserve both endpoints and report every unverified branch* gives the operation an observable finish. It also says what does not need to be solved.

Purpose determines:

- how far the Chain must be extended;
- which edges need fresh condition;
- what ship capability must be preserved;

- which Unknowns can remain;
- what information must be handed off; and
- when the operation should stop.

The purpose may change after new evidence. Record that change. Otherwise, a small survey can become an open-ended commitment without anyone deliberately accepting the additional risk.

Know what success looks like before Anoikis offers something more interesting.

## Define Exposure

Every task places something at risk: a ship, route, time window, cargo, group or the information another pilot depends upon.

State which exposure matters most.

A scouting hull may be replaceable while its return Bookmark is critical. A hauler may carry little personal risk but depend on a Chain whose mass state cannot tolerate unrecorded traffic. A fleet waiting at Home may turn one Pathfinder's delay into many pilots' lost time.

The exposure determines the evidence required.

A low-commitment branch check can proceed with Unknown activity beyond the next edge. Moving a valuable or slow ship may require a recently observed arrival Grid, current connection state and a scout holding the far side.

This is not a formula based on price. Replaceability, strategic importance and recovery all matter.

Before entry, complete one sentence:

*This operation can tolerate [named uncertainty], but it stops if [named condition].*

The blanks make uncertainty operational. They prevent every uncomfortable observation from becoming panic and every convenient observation from becoming permission.

## Open the Picture

Begin with the current system rather than the remembered Chain.

Confirm the System Identifier, the available Wormholes, the Signatures and the Shared Map's expected edges. Read the state of the connection that will carry the first commitment. Check whether Bookmarks are present, correctly shared and usable by the people who need them.

Then establish the immediate activity picture: Grid, Local disclosure, Directional Scanner and any reports from scouts beyond the first edge.

This opening does not need to resolve every Signature. It needs to expose where the old map and present system disagree.

Record:

- edges personally observed now;
- edges still supported only by reports;
- connections whose state has aged;
- new or missing Signatures;
- known activity and its Timestamp; and
- the first Unknown that could change the plan.

The operation starts from this baseline. Without it, later change has nothing reliable to differ from.

Do not spend the first minutes proving the map was right. Spend them finding where it may no longer be.

## Assign Ownership

Information degrades when everyone assumes someone else is maintaining it.

For each critical function, establish an owner:

- who is extending the Chain;
- who is watching a key Wormhole Grid;
- who updates connection state;
- who maintains the Shared Map;

- who receives threat reports; and
- who decides that the operation stops.

In a small operation, one pilot can hold several roles. Naming them still matters. The same person then knows when workload exceeds attention.

Ownership is not exclusive authority over facts. Any pilot can report a change. It is responsibility for making sure the change reaches the common picture.

When ownership passes, use a handoff. Include the current system, route, critical Bookmarks and connection conditions. Add recent contacts, active timers and open Unknowns.

*Map updated* is not a handoff. It describes an interface action, not the state another pilot inherits.

## Work in Loops

The field sequence becomes a loop during daily work:

Observe → Record → Understand → Evaluate → Decide → Act → Observe again.

The size of the loop should match the task.

For one Wormhole, it may begin with current Information, continue through a transit and end with an arrival-side Bookmark and new scan. For a branch survey, it may cover several systems before the Pathfinder pauses to reconcile the map.

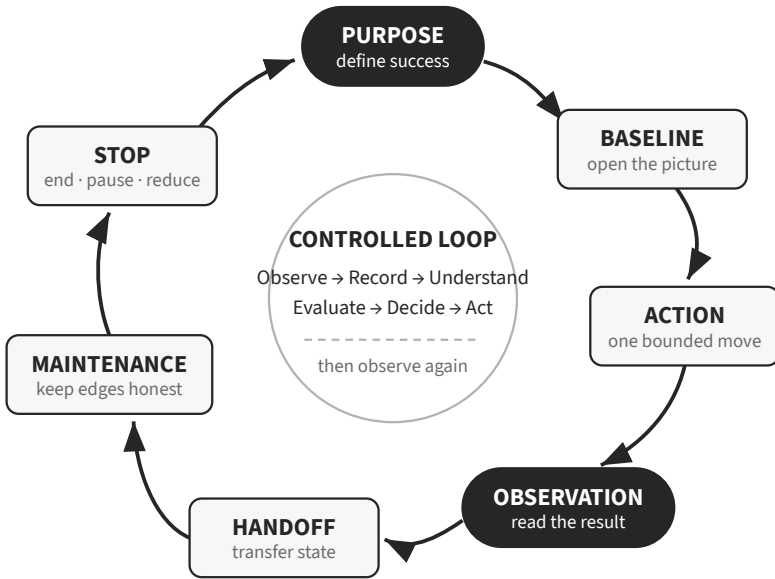
Every loop needs a deliberate close.

Action without the second Observation leaves the result assumed. A transit without an arrival check does not confirm the mapped destination. Unverified Shared Locations do not confirm that the next pilot can use them. A threat response without a later baseline leaves the system permanently described by the alarm.



Closing the loop turns movement into knowledge. It also shows when the next loop should not begin.

## DAILY OPERATIONS • WORK IN CLOSED LOOPS



ACTION WITHOUT THE NEXT OBSERVATION LEAVES THE RESULT ASSUMED

**Figure AFH-B1-FIG-016 — Fieldwork runs as a controlled cycle.** Purpose defines success, Baseline exposes change, Action creates a result and the next Observation closes the loop. Handoff, Maintenance and Stop preserve control between loops.

## Maintain the Chain

A Chain is useful only while its critical edges remain current enough for the traffic placed upon them.

Prioritise maintenance by consequence.

The only route Home, a connection carrying repeated fleet traffic and an edge near poor lifetime or mass condition need more attention than an

unused branch. That attention can include a fresh Information reading, traffic records, a scout report or confirmation from both sides.

Retire collapsed edges promptly, but preserve enough history to explain why the route changed. A new Wormhole to a familiar system is a new connection with new endpoints and condition.

Do not make the map visually calm by hiding uncertainty. Use clear states such as Observed, Reported, Unverified and Expired. A provisional line can be used when the commitment tolerates it. A clean false line cannot be interpreted at all.

Maintenance is not finishing the Chain. It is keeping the important routes honest.

## Manage Time

Several clocks move during an operation.

Wormholes age. Polarization histories expire and restart. Shared Locations may become usable after a delay. Reports grow stale. The pilot's available session and attention also shorten.

These clocks should not be compressed into *we still have time*.

Name the time that matters:

- earliest connection concern;
- last direct observation of the return;
- recent transit times;
- deadline for the operation's purpose;
- time needed to extract the slowest commitment; and
- reserve for a route that must be rebuilt.

The useful stopping point comes before the final minute. If every remaining minute is required for the intended route, the operation has no capacity for Anoikis to change.

Time reserve is not inactivity. The reserve keeps a changed edge from becoming an emergency by definition.

## Communicate Changes

Routine reports should be shorter than the reasoning that produced them and more precise than a verdict.

Report changes that affect movement, exposure or shared understanding:

*J123456, 15:10: new K162 resolved. Far side unentered. Home edge unchanged since 14:55. No ships or probes on latest broad scan from the inbound.*

The report separates new fact, unverified space, aged state and bounded scan. That structure lets the next pilot decide which part matters.

Avoid flooding communications with every repeated negative scan. A baseline followed by meaningful changes preserves attention. When the operation requires continuous watch, agree how silence and regular status reports are interpreted.

If a report is uncertain, include the uncertainty. If a value came from another pilot, preserve that Source. When urgency prevents a complete report, send the immediate stop message first and add the evidence when position allows.

Communication should reduce the number of hidden assumptions carried by the group.

## Stop Conditions

Quiet work needs an end that is not simply ship loss or exhausted time.

Possible stop conditions include:

- loss of a confirmed return route;
- connection state below the accepted commitment;
- activity the available support cannot evaluate;
- loss of probes, launcher or Bookmark access;
- Environmental Effect incompatible with the planned ship;
- workload beyond the pilot's reliable attention; or

- completion of the defined purpose.

Completion belongs on the list. Continuing after success can expose the result without adding value.

A stop condition can lead to return, pause, handoff or a smaller objective. Other opportunities in the system need not be abandoned automatically.

When the threshold is reached, state it and act while options remain. Do not renegotiate the accepted risk only because the ship is already deep in the Chain.

## **Close Deliberately**

An operation does not end when the Pathfinder docks or logs off.

Some edges still visible on the Shared Map may be used by another pilot. Temporary Bookmarks may need retirement. A connection state may need a final Timestamp. Threat reports may need to be closed or left active with clear ownership.

Close the information:

- mark which edges were last observed and when;
- retire connections confirmed collapsed;
- identify Bookmarks that remain operational;
- preserve unresolved Signatures and branches;
- record traffic that affects mass or Polarization;
- state where any pilot remains in the Chain; and
- hand off the next required check.

Do not erase the unfinished parts. They are the beginning of the next operation.

The best closing report tells another Pathfinder whether to trust, verify or retire each critical part. It leaves no silent obligation attached to a pilot who has already left.

## **Field Principle**

Daily work keeps purpose, exposure, ownership, time and return visible while the Chain changes.

Open with a present baseline. Work in closed observation loops. Maintain critical edges by consequence, communicate meaningful change and stop while the result can still be brought Home.



# Chapter 15 - Returning Home

Three systems from Home, the Pathfinder finds the expected Wormhole missing.

The Bookmark is still present. The old edge remains drawn on the Shared Map. The previous report was correct when it was made.

Warping to the position proves only that the old door is gone.

Home has not disappeared. The route that represented it has changed. Recovery uses the same skills as entry: observe the current system, preserve what remains, scan what is hidden and refuse to make one failed edge mean there is no way back.

Returning Home is not reversing a recorded list of jumps. The return is a new operation whose purpose is to deliver the ship, pilot and useful knowledge to the intended destination.

## Define Home

Home is a destination, not a direction on the map.

For one pilot, it may be a particular Known Space station. For another, it may be a Wormhole Structure or the starting system of the expedition. A Chain alias such as Home can represent that destination, but it should not replace the identity another pilot needs to verify.

State the return objective precisely:

*Reach the original departure system with this ship and preserve any changed route discovered on the way.*

This definition distinguishes success from partial progress. Reaching Known Space through an unexpected exit may solve the Anoikis route while leaving a long or dangerous journey to the actual destination. Reaching a familiar Wormhole system may still leave the final connection unverified.

The word *home* carries comfort. The route deserves the same evidence as any other destination.

## Begin Outbound

The return begins during departure.

Each arrival-side Bookmark preserves a possible next step back. Each mapped edge records the relationship the ship may later depend upon. Its Timestamp shows how old that support will be when the pilot turns around.

That discipline cannot promise a return from every outward transit; Wormholes remain temporary. Instead, the Pathfinder leaves enough structure for change to be recognised.

Before going deeper, ask:

- Is the current return endpoint preserved?
- Does the Shared Map identify both systems and this connection?
- What is the latest lifetime and mass Observation?
- Which other pilot or tool holds useful route information?
- What capability remains if this edge is gone later?

The answers set the cost of the next step.

Without a describable route back before departure from the present system, extending the Chain becomes the replacement of navigation with hope.

## Read the Route

Before moving Home, read the entire expected route as a set of claims.

For every edge, identify:

- the two systems it is believed to connect;
- the usable Bookmark on the near side;
- the Source and age of its latest confirmation;
- current lifetime and mass condition, when relevant;



- known traffic since that observation;
- ship-size compatibility; and
- an alternative if the edge fails.

The route may contain different confidence levels. The next edge may be Observed. A middle edge may be Reported by a fleet member. The final edge may be old but still plausible.

Do not call all three *mapped* and treat them equally.

Prioritise verification where failure has the greatest consequence. Where the ship can still return to a safe working position, test the uncertain edge before moving every following commitment towards it.

A route is ready when its uncertainty fits the ship and recovery, not when every line shares the same colour.

## Test Each Edge

Traverse Home one connection at a time.

Before Warp, confirm the current system and intended Bookmark. On the Wormhole Grid, confirm the object, read its present condition and compare visible details with the route record. Refresh the activity picture appropriate to the commitment.

After transit, confirm the destination. Preserve or verify the far endpoint. Update transit time, mass relevance and the state inherited by the next edge.

This rhythm catches errors close to their cause.

The wrong Bookmark can be stopped before Warp. A deteriorated Wormhole can be reassessed before transit. An unexpected destination can be contained before the Shared Map is updated as though the planned route succeeded.

Do not let the familiarity of returning remove the arrival check. The far Grid can contain new contacts, a disruption field or a route change that was not present outbound.

Every successful edge earns the right to evaluate the next without guaranteeing it.

## **Refresh Activity**

The outbound activity picture is history by the time the ship returns.

The limits established in Chapters 9 and 10 have not changed. Silent Local does not supply a roster, and an earlier Directional Scan belongs to another position and time. New connections may have carried ships into the system since both were observed.

A return Wormhole can be attractive to an observer because traffic is expected to use it. Probes seen earlier may have resolved the same connection. A route shared with others can have generated additional mass and attention.

Refresh the evidence before exposing the ship to that predictable route. Report meaningful changes without linking them beyond the evidence. A ship near the return direction may be relevant; it is not automatically the pilot who launched earlier Probes.

Refreshing cannot prove the route safe. It prevents an old quiet system from authorising a new transit.

## **Carry the Clocks**

Return movement creates Polarization as it proceeds.

Recent edge use may have come from checking it, retreating from a threat or following another ship through. Each pilot can therefore approach the same Home route with different directional histories.

Before depending upon a quick reversal, record the last transit on this connection in the intended direction. Keep the ten-second Session Change, five-minute directional history and Wormhole condition separate.

The route can be open while one pilot is blocked. A second may be clear while the Wormhole can no longer carry the ship.

If waiting is required, update the rest of the picture during the interval. Do not watch one clock while the Grid, connection and following route age unseen.

Time belongs to navigation when the door remembers how the pilot used it.

## Missing Edge

When an expected Wormhole is absent, stop treating the old edge as current.

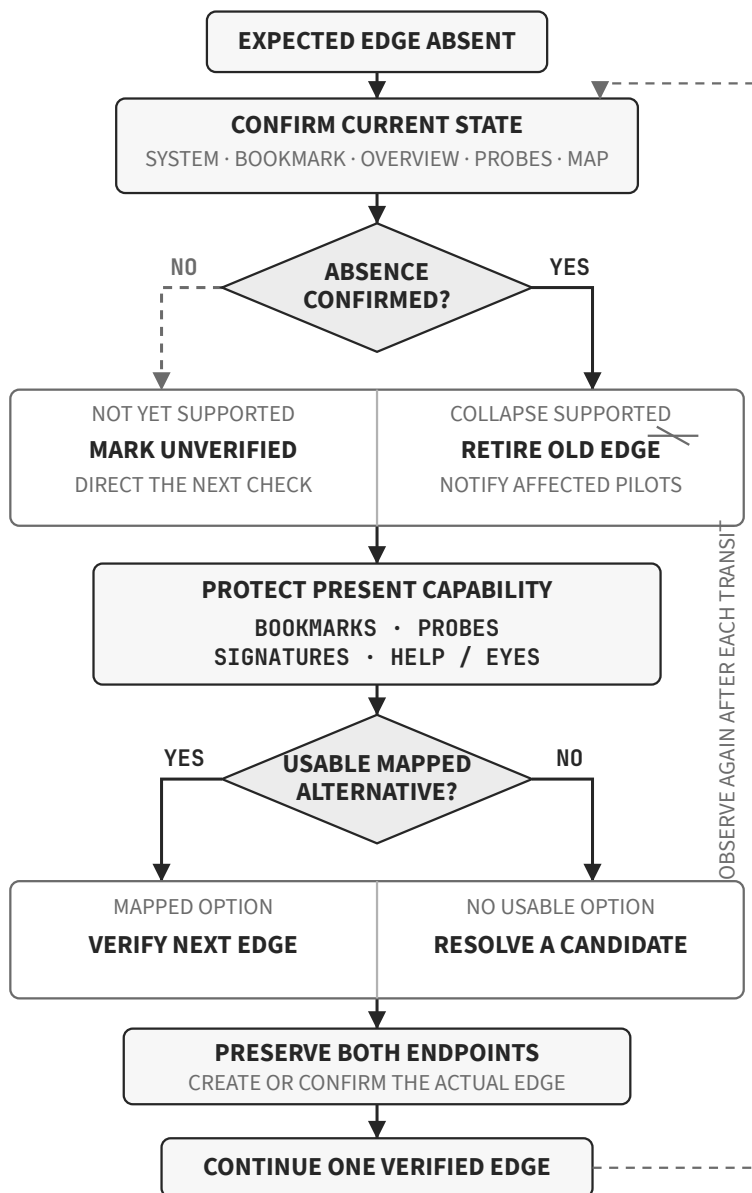
Confirm the system and Bookmark. Check whether the object is truly gone rather than hidden by Overview settings or a mistaken position. Reconcile the Probe Scanner and Shared Map.

Once collapse is confirmed:

- retire the connection as collapsed;
- preserve the systems and other edges;
- note the time and Source of the failure;
- tell pilots who might travel towards it; and
- identify which part of the return is now unverified.

Do not attach a replacement Wormhole to the old edge because it appears in a similar area or leads to the same kind of space. Resolve it, enter it when appropriate and create a new relationship.

The old route has ended. The return problem has changed from following to finding.

**CONFIRM · PRESERVE · REBUILD FROM EVIDENCE**

**Figure AFH-B1-FIG-017 — Recovery begins with an honest present state.** Confirm the missing relationship, preserve current capability, retire a collapsed edge only when supported, and build any replacement as a new Connection with its own endpoints, Source and Timestamp.

## Protect the Present

Before searching for a replacement, secure the information and capability that remain.

Confirm the current System Identifier. Preserve usable Bookmarks. Keep probes available and the launcher functional. Record every unresolved Signature. Identify other mapped branches and pilots who may hold far-side positions.

Then report the situation precisely:

*J123456, 16:05: expected Home edge confirmed collapsed. Current system, probes and two other mapped connections available. New Signatures ABC-123 and DEF-456 unresolved. Beginning replacement search.*

This turns *lost* into a bounded problem.

Panic tends to spend the remaining assets. Probes are left behind. An unidentified Wormhole is crossed without preserving its endpoint, or an old map line is followed because it points in the desired direction.

Treat the present system as the new starting point, not as failure.

## Find Replacement

A replacement route is discovered through the same disciplined sequence as the original.

Resolve Signatures. Preserve candidate Wormholes. Read destination clues and condition. Enter only when the ship and recovery can tolerate the Unknown. Bookmark the far endpoint and build a new edge from the actual destination.

The new route may reach Home directly, reach Known Space or connect with another recognised part of the Chain. It may also lead away from the intended destination.

Progress should be measured by verified options, not by the emotional sense of moving closer.

A deeper Chain can still improve the return if it adds usable connections and maintains recovery. A Wormhole that feels promising but cannot support the ship or lacks sufficient lifetime may not.

Share the new route with Source and Timestamp. Help becomes possible only when the replacement is more than a private trail of Bookmarks.

## Use Other Eyes

A second pilot can observe a side the Pathfinder cannot.

A fleet member at Home may still hold the far endpoint of a connection. A scout can test an uncertain middle edge before the main ship arrives. A pilot in Known Space can evaluate the ordinary route from a new exit to the final destination.

Ask for bounded information:

*Can you confirm the J123456 side of connection X still exists and report its current condition?*

This is more useful than *Is the route open?* The answer carries position, object and required observation.

Preserve the difference between direct Observation and another pilot's Report. Shared work increases coverage; it does not merge viewpoints into one omniscient map.

When help is unavailable, reduce the commitment to what the solo Pathfinder can verify. Waiting, holding a safe position or searching a smaller branch can be better than moving a ship into an unsupported route.

Independence includes knowing when another set of eyes would materially change the decision.

## Known Space

Reaching Known Space changes the navigation model but may not complete the return.

Local, Stargates, Security Status and route planning become relevant under their ordinary Known Space rules. The Wormhole endpoint behind the ship still deserves a Bookmark if the route may be needed again.

Relief must not erase the last Wormhole observations.

Record the Known Space system, connection condition and time. Tell the group whether the exit is High, Low or Null Security space and whether the onward journey has been evaluated. A route to Known Space is not automatically a safe route to the final destination.

Detailed Known Space travel lies outside this book's scope. The transfer of responsibility does not. The important boundary is knowing when the Anoikis route has ended and which different risks now govern movement.

Home is reached when the defined destination is reached, not when the stars become familiar.

## Close the Route

Arrival creates one final obligation: leave the route honest.

Update the Shared Map with the edges actually used. Mark failed and collapsed connections. Timestamp the last condition of any exit another pilot may use. Retire temporary Bookmarks that have lost their object, while preserving records still needed for review.

Report:

- the destination reached;
- the route used;
- which edges were directly confirmed;
- any new replacement connections;

- traffic and timer information still relevant;
- pilots or assets remaining beyond the route; and
- the next required verification.

Then separate the completed return from the continuing Chain. The fact that one ship arrived does not promise the same route to a later ship.

A good return leaves two results: the Pathfinder is Home, and the map tells the truth about how that happened.

## **Field Principle**

Home is a destination reached through present connections, not a command that replays the outbound path.

Read the expected route as a set of claims. Confirm each edge before depending upon it. When an edge fails, protect the current system and rebuild from evidence. Complete the return by closing the route record behind the ship.



# Chapter 16 - Preparing for

## Volume II

The ship is Home.

The changed Chain is visible on the Shared Map. The collapsed edge has been retired. The replacement route carries Sources and times. From that record, the Pathfinder can explain what was observed, what remained Unknown and why the final movement was accepted.

This is not mastery of Anoikis.

The ending offers something more useful: an ability to enter without surrendering judgement and to operate without pretending the map is permanent. It also leaves memory free from having to become a route.

Volume I began beside an unfamiliar Wormhole with one decision still open. It ends with the Pathfinder able to keep that decision open long enough to understand it.

### What Remains

The durable result of *Pathfinder* is not a sequence of buttons.

The reader can now distinguish:

- a system from the connection that reaches it;
- an Observation from a Derived conclusion;
- a complete scan from a safe destination;
- a Bookmark from the meaning attached to it;
- a Shared Map from the changing space it models;
- silent Local from an empty system;
- a Directional Scan from continuous coverage;
- Polarization from Session Change and mass state;
- an Environmental Effect from a general advantage; and
- a route Home from the route remembered outbound.

These distinctions are the foundation of independent action.

Interfaces will change. Values will be rebalanced. New ships and modules will alter which options are practical. Current Sources remain available because the reasoning does not depend on one screenshot remaining unchanged.

Knowledge is fleeting. Understanding endures because it knows what must be checked again.

## **Independent Pathfinder**

Independence does not mean operating alone or knowing every answer.

An independent Pathfinder can identify the current question, gather evidence appropriate to it and state the limits of the result. This independence includes using a Shared Map without becoming passive, accepting another pilot's report without turning it into personal Observation and stopping when the available capability cannot support the commitment.

The standard is practical:

Can the pilot scan a connection, enter it, preserve the return, build usable navigation, recognise immediate risk and find a way Home when the old route changes?

Success does not require every expedition to continue. A disciplined abort can be independent judgement. Asking for another scout can be independent judgement. Leaving a Site unresolved can be independent judgement.

The opposite of independence is not assistance, but action whose assumptions the pilot cannot see.

## **Limits Remain**

This volume has deliberately stopped before doctrine.

It has not taught advanced rolling, Capital Escalation, Evictions, Corporate Logistics, Industrial Optimization or doctrine-level PvP. It has not supplied a universal fit, a fixed Site table or a permanent map.

Those omissions protect the purpose of the book.

The Pathfinder first needs a relationship with uncertainty that remains useful when ships become larger, fleets become more complex and consequences extend beyond one pilot. Advanced technique without that foundation can perform the right motion for reasons that fail as soon as the situation changes.

Recognising the boundary is part of readiness.

When an operation requires doctrine, use current specialists, current tools and current references. Do not stretch a beginner principle into authority it was never meant to carry.

This volume provides the questions that advanced work must still answer.

## **Practise Calmly**

Confidence should be built before the expensive decision.

Repeat the complete field loop in low-commitment conditions:

Scan a connection. Record the result. Read its state. Enter. Preserve the far endpoint. Establish the arrival picture. Extend one edge. Turn around and verify the route Home.

Introduce one complication at a time.

Use a Reported edge and then verify it. Compare two Directional Scanner positions. Track both Polarization directions. Enter an Effect system and identify which fitted attributes changed. Rebuild a route after deliberately retiring an old map edge without pretending it still exists.

Practice should produce explanations, not merely faster input.

After each run, ask what the pilot expected, which Observation changed that expectation and what action remained reversible. Speed will grow

from recognition. It should not be purchased by skipping the moment in which the system disagrees.

## Keep a Log

A small Field Log turns experience into evidence.

Record decisions that were difficult, surprising or wrong:

- the Observation that began the decision;
- the assumption carried into it;
- the action taken;
- what happened next;
- which signal was missed or overweighted; and
- what would change the next attempt.

Rather than a diary of every scan, the log collects judgement under real conditions.

Over time, patterns appear. One recurring pattern may be scans reported without filters, Bookmarks delayed until after leaving Grid or work continued after the operation's purpose is complete. A different Pathfinder may discover that Shared Map handoffs are the recurring weak point.

These patterns are more useful than a vague instruction to be careful.

Anoikis changes. A disciplined record allows the Pathfinder to change with it.

## Maintain Knowledge

The facts in this volume will not all age at the same rate.

The distinction between a system and a connection is architectural. A Directional Scanner field, Effect modifier, module interaction or UI label can change through a release. Community tools can alter their data model or cease operation.

Maintain knowledge by keeping Source, date and scope attached.

Before relying on a precise mechanic after an update, check the current official documentation, Static Data, Patch Notes and client. Use community sources to fill documented gaps, not to make an old answer look official.

When evidence conflicts, preserve the conflict until it is resolved. Do not choose the value that best fits the existing page.

Apply the same method to the book itself: Observe the current state, record it, understand the change, evaluate consequence, decide what must be revised and verify the result.

A field manual remains trustworthy by admitting that maintenance is part of knowledge.

## Ready for Explorer

Volume II is *Explorer*.

Its place in the series is longer-term life and work in Anoikis. That commitment increases the importance of routine, shared infrastructure, resource decisions and the relationship between daily activity and a changing Chain.

This volume does not begin that work.

The reader is ready to approach it when the skills of *Pathfinder* no longer depend on an instructor supplying the missing meaning. Readiness includes returning from an unplanned route, keeping a map honest, reporting uncertainty and recognising when the ship's environment invalidates an assumption.

Readiness is not measured by never becoming lost or surprised. It is measured by what the pilot protects when the surprise occurs.

Volume II can then build duration upon a foundation that already understands change.

## Five Volumes

The series follows increasing commitment.

*Pathfinder* establishes independent basic operations. *Explorer* moves into longer-term life and work. *Survivor* develops threats and combat. *Navigator* expands towards fleet movement and logistics. *Commander* addresses leadership and strategy.

Each volume depends on the earlier discipline without repeating its entire scope.

The sequence is not a rank. A Commander still needs honest Bookmarks. A Navigator still needs to distinguish a Reported edge from an Observed one. A Survivor still needs to know whether Polarization has removed the expected escape.

Complexity adds people, assets and consequence. Foundational evidence remains equally important.

Finish one commitment before borrowing authority from the next.

## Last Return

Return to the first arrival.

The Wormhole is behind the ship. The Grid may look empty. Local offers no roster. The route has only one confirmed edge, and the system has not yet explained itself.

That first arrival now prompts a different response.

Not a memorised sequence. A set of disciplined questions:

What is visible? Which Source produced that information? What remains outside it? How much will the next action expose? Which record preserves the return? What can still be reversed?

The questions do not make Anoikis safe. They make the pilot present inside it.

Observe. Record. Understand. Evaluate. Decide. Act. Observe again.

The Chain changes. The Pathfinder notices.

## **Final Principle**

Do not ask Anoikis for certainty it cannot give.

Build the clearest present picture available. Keep its Sources, age and Unknowns visible. Choose a commitment that the evidence can support, preserve the way back and begin observing again after every action.

That is how a route becomes knowledge.

That is how a Pathfinder returns.





# Appendices

The appendices compress the fieldwork into reference forms. They do not replace the reasoning developed in the chapters. A completed form can preserve what a pilot knew; it cannot make the underlying Observation broader or newer.

## Field Sequence

| Stage         | Working question                                                        | Record                                                     |
|---------------|-------------------------------------------------------------------------|------------------------------------------------------------|
| Observe       | What did this position, interface and configuration actually reveal?    | The bounded result                                         |
| Record        | What must remain usable after memory and context change?                | Observation, Source and Timestamp                          |
| Understand    | Which facts describe the system, the Connection, the Grid or the pilot? | Separated claims                                           |
| Evaluate      | Which Unknown could change the next command?                            | Consequence and exposure                                   |
| Decide        | What commitment can the evidence support now?                           | Choice and stop condition                                  |
| Act           | Which deliberate action advances the purpose?                           | Transit, scan, Bookmark, report or return                  |
| Observe again | What did the action change?                                             | A new Observation rather than a silently refreshed old one |

The sequence can occupy seconds or an entire expedition. Its value lies in closing the loop after action.

## Handoff Record

Use the smallest report that lets the next pilot reconstruct the decision. Remove fields that do not matter to the operation; do not remove uncertainty because the report looks unfinished.

Timestamp:

Pilot:

Current system:

Purpose:

Observed:

Derived:

Reported:

Unknown:

Route changed:

Critical edge:

Usable endpoint Bookmarks:

Connection state:

Traffic since Observation:

Current activity:

Owner:

Stop condition:

Next useful Observation:

A handoff is complete when its receiver can tell which claim came from where, how old it is and what would make the planned movement stop.

## Return Audit

Read a return route as a set of current claims before depending on it.

- Confirm the defined Home, not merely the direction remembered outbound.
- Trace every expected edge from the current system to Home.
- Match each edge to a usable endpoint Bookmark.
- Preserve the latest Connection state, Source and Timestamp.
- Separate personal Polarization from Session Change and mass condition.
- Identify the oldest critical Observation.
- Name the first missing or Unverified relationship.
- Decide which failure requires a pause, help or a replacement route.

At each transit, test only the next edge. After arrival, preserve the endpoint, compare the system with the expected node and update the Shared Map from what the crossing actually established.

After reaching Home, retire failed edges, keep unresolved disagreement visible and record the route that was used rather than the route that was planned.



# Glossary and Index

This combined register defines the controlled language of *Pathfinder* and points to the sections where each idea is established or applied. References select useful explanations rather than every occurrence. References to sections remain valid across editions; final print layouts may add page numbers.

## **Anoikis**

The operational environment formed by persistent solar systems reached through temporary Wormhole Connections rather than a permanent Stargate route. *See:* Introduction, *A Different Geography*; Chapter 2, *Space, Not Passage*.

## **Bookmark**

A saved position whose operational meaning depends on its object or coordinates, label, availability and current purpose. *See:* Chapter 7, *Position With Meaning*; *Object or Coordinate*; *Verify the Record*.

## **Chain**

The currently known shape of access through Wormhole Connections. It describes what the pilot or group can presently support, not a permanent network. *See:* Chapter 2, *The Living Chain*; Chapter 8, *Shape of Passage*; Chapter 14, *Maintain the Chain*.

## **Class**

The C1-C6 context used for ordinary Wormhole Space content and Effect strength. Class identifies neither present pilots, Connection health nor the result of the next decision. *See:* Chapter 4, *The Six Classes*; *Class Is Context*; *Not a Verdict*.

## **Connection**

One particular Wormhole relationship between two locations. A Connection has two endpoints and its own changing condition. *See:* Chapter 2, *Space, Not Passage*; Chapter 3, *Read the Door*; Chapter 8, *State the Edge*.

### **Coordinate Bookmark**

A Bookmark that preserves the ship's position when the location is saved. *See: Chapter 7, Object or Coordinate.*

### **Cosmic Anomaly**

A Probe Scanner result that does not require probe localisation before it can be warped to. *See: Chapter 5, Two Result Types.*

### **Cosmic Signature**

An unresolved Probe Scanner result that must be measured with Probes before it becomes a warpable location. *See: Chapter 5, Two Result Types; Each Pass Measures.*

### **Derived**

Information inferred from one or more Observations with the reasoning kept visible. *See: Introduction, Four Information States; Chapter 1, Build a Picture.*

### **Directional Scanner**

An active scanner that returns a configured snapshot from the ship's current position, range, angle, direction and filter. *See: Chapter 10, A Manual Snapshot; The Scan Volume; Range and Angle.*

### **Edge**

The map representation of one current Wormhole Connection between two system nodes. *See: Chapter 8, Nodes and Edges; State the Edge.*

### **Endpoint**

One side of a Connection as a position within its local system. Crossing creates a relationship between two endpoints; it does not make them one Bookmark. *See: Chapter 6, Separate Both Sides; Chapter 7, Save the Door; Chapter 8, Endpoints Matter.*

### **Environmental Effect**

A system-wide condition that changes selected ship attributes. It is separate from Class, System Type, Connection state and current activity. *See: Chapter 4, Effects Stay Separate; Chapter 12, The System Acts.*

## **Expired**

The Wormhole Information state shown after *Reliable Lifetime* has ended. It means collapse may occur at any time; it does not prove that the Connection has already disappeared. *See: Chapter 3, Reliable Lifetime; Record the State.*

## **Grid**

The immediate space the client presently displays around the ship. A clear Grid is one bounded Observation, not a statement about the whole system. *See: Chapter 1, Read Before Moving; Chapter 9, Evidence Has Reach.*

## **Home**

The defined operational destination an expedition intends to reach. Home is not a guaranteed direction or a permanent route. *See: Chapter 2, Home Is Conditional; Chapter 15, Define Home.*

## **K162**

The designation used on the receiving side of a Wormhole Connection. The originating side carries the Type designation that sets the Connection's limits. *See: Chapter 3, Type Sets Limits; Chapter 9, Presence Leaves Traces.*

## **Local**

The local communication channel. Local does not automatically provide a complete population roster in Wormhole Space. *See: Chapter 1, Silence Proves Nothing; Chapter 9, A Missing Roster; Speech Reveals.*

## **Object Bookmark**

A Bookmark created from an identifiable object and preserving that object's position at the time of creation. *See: Chapter 7, Object or Coordinate.*

## **Observation**

A bounded piece of evidence preserved with the conditions that produced it. Its reach, Source and age limit what it can support. *See: Introduction, Four Information States; Chapter 9, Evidence Has Reach.*

## **Observed**

Information established directly by the pilot through the client or an action whose result is visible. *See:* Introduction, *Four Information States*; Chapter 1, *Build a Picture*.

## **Pathfinder**

The operational role developed in this volume: a pilot who turns incomplete information into a recoverable route without asking it for false certainty. *See:* Introduction, *The Pathfinder's Work*; Chapter 16, *Independent Pathfinder*.

## **Polarization**

A pilot- and Connection-specific transit restriction with separate directional histories. It is distinct from Session Change and Wormhole mass. *See:* Chapter 11, *Two Directional Clocks*; *Pilot, Not Ship*; *Mass Is Separate*.

## **Probe Scanner**

The interface used to read Cosmic Anomalies, measure Cosmic Signatures and manage scan results. *See:* Chapter 5, *A Different Picture*; *Progress Is Evidence*; *Filters Change Silence*.

## **Reliable Lifetime**

The Wormhole Information indication of the period during which lifetime alone will not close the Connection. Treat it as a lower-bound assurance, not an exact collapse timer. *See:* Chapter 3, *Reliable Lifetime*.

## **Reported**

Information received from another pilot, tool or record and not yet established as the receiving pilot's own Observation. *See:* Introduction, *Four Information States*; Chapter 8, *State the Edge*.

## **Session Change**

The short post-transit restriction that temporarily prevents another jump and selected actions. It is separate from post-jump protection and Polarization. *See:* Chapter 6, *Use the Pause*; Chapter 11, *Session Change*.



### **Shared Map**

A group model of systems, Connections, endpoints and changing state. It extends memory but remains only as current as its Sources and Observations. *See:* Chapter 8, *Shape of Passage; Tools Extend Memory; Close the Loop.*

### **Source**

The origin of a claim: direct client evidence, another pilot, a tool, current data or another identified record. *See:* Introduction, *Four Information States*; Chapter 8, *Freshness Has Layers.*

### **System Identifier**

The identifier that names the current solar system. It establishes location, not a route to or from that location. *See:* Chapter 2, *No Gate Network*; Chapter 4, *Read the System.*

### **System Type**

A classification used when ordinary C1-C6 expectations do not fully describe the system, including Shattered, Thera and Drifter categories discussed in this volume. *See:* Chapter 4, *Beyond C1-C6; Shattered Systems; Thera Stands Apart; Drifter Categories.*

### **Timestamp**

The time attached to an Observation or changeable claim. Editing a record does not renew the age of evidence that was not observed again. *See:* Chapter 3, *Record the State*; Chapter 8, *Freshness Has Layers.*

### **Unknown**

Information that has not been established at the level required by the current decision. Unknown is not the same as absent. *See:* Introduction, *Four Information States*; Chapter 8, *Preserve Unknowns.*

### **Unverified**

A record state used when a relationship is expected or Reported, but current evidence does not yet confirm it. *See:* Chapter 8, *Reconcile the Picture; Recover From Drift.*

## **Wormhole**

The temporary Connection object through which a ship transits between two locations. Its Type and current information set limits; they do not promise a safe destination. *See: Chapter 2, Space, Not Passage; Chapter 3, Read the Door.*

## **Wormhole Space**

The persistent solar systems reached through Wormhole Connections and not joined by a permanent Stargate network. *See: Chapter 2, Persistent, Not Fixed; No Gate Network.*

# Further Reading

EVE Online continues to change. These sources extend the concepts in this volume, but the live client and current official documentation remain authoritative. The principal official and community references were checked again for release on 7 August 2026.

## Official Foundations

- *Wormholes*, EVE Online Support — connection lifetime, mass and discovery.
- *EVE Academy* — *Wormhole Basics*, EVE Online — introductory Wormhole Space context and Classes.
- *Scanning*, EVE Online Support — Probe Scanner, Cosmic Signatures and Probes.
- *Overview Settings*, EVE Online Support — the configured limits of the Overview.
- *Session Change*, EVE Online Support — post-transit Session Change restrictions.

## Field References

- Wormhole Space, EVE University Wiki — current community reference for system categories and Environmental Effects.
- Wormholes, EVE University Wiki — connection terminology, Polarization and operational context.
- Directional scanning, EVE University Wiki — Directional Scanner geometry, filters and limitations.
- Bookmark, EVE University Wiki — personal and shared locations, object and coordinate Bookmarks.

Community references are secondary sources. Use them to extend current official material, not to hide disagreement or an outdated mechanic.

## Data and Change

- *Static Data*, EVE Developer Documentation — current data packages and release context.
- *Using Static Data*, EVE Developer Documentation — structure and use of the current data.
- *Patch Notes — Version 23.02*, EVE Online — the `Reliable Lifetime` and `Expired` terminology used in this edition.

Check publication dates, data builds and client labels before transferring a precise value into an operation.

# Acknowledgements

*Pathfinder* exists because knowledge in Anoikis has always been carried by pilots willing to observe carefully, explain what they saw and leave a usable route for someone else.

The author thanks the EVE Online community members who build educational resources, maintain mapping and reference tools, test uncertain mechanics and share the limits of their own conclusions. Official EVE Online and developer documentation supplied the primary foundation; current community references helped identify gaps and questions that official material does not always answer at field level.

The editorial and technical work behind this volume follows the book's own principle. Keep the Source visible, preserve uncertainty and check again when the environment changes.

Any remaining error belongs to the author and publisher.



# About the Publisher

## **Unsettling Whisper**

*A Corporation of Quietly Eerie*

Unsettling Whisper publishes *The Anoikis Field Manual* as an unofficial, fan-created and non-commercial series for the EVE Online community.

The series is written by Irdyna Ferydo and follows increasing operational commitment across *Pathfinder*, *Explorer*, *Survivor*, *Navigator* and *Commander*. Each volume is completed before work begins on the next.

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