



iSIP · TASK I / II — DESIGN INFORMATION & ANALYSIS

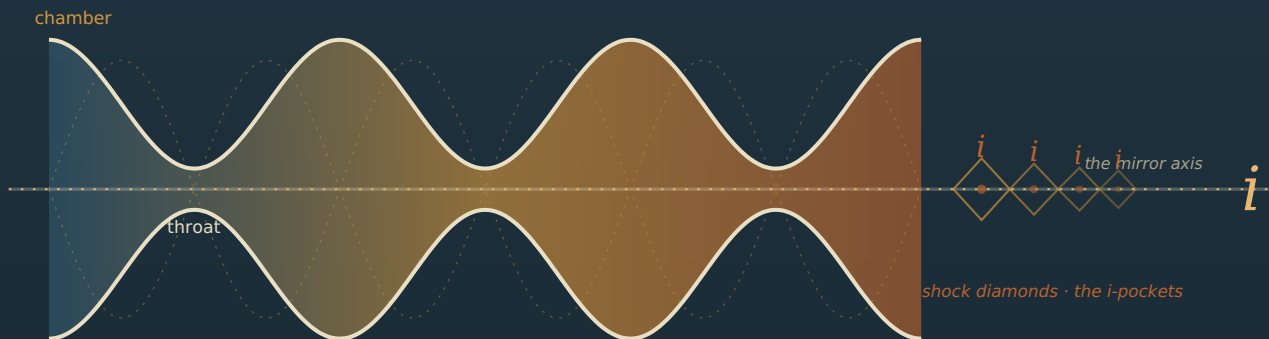
CONVERGE TO DIVERGE

Two waves, mirrored about the *i*-axis, build the wall of an engine. The pinch is not the punishment — it is the precondition for thrust.

01

The Mirrored Wave

A sine and its reflection bound a channel. Where the wave rides high, the channel opens — a **chamber**. Where it returns to the *i*-axis, the channel pinches — a **throat**. The flow has no choice: it must squeeze to the speed of sound at the throat before it can run supersonic in the opening beyond. The deeper the constriction, the fiercer the release.



SWEEP — THROAT DEPTH DRIVES THE RELEASE

THROAT (×AMP)	EXPANSION E	EXIT MACH	RELEASE
1.00 · open	2.00	2.06	54.5%
0.50	3.00	2.40	60.4%
0.28	4.57	2.72	65.2%
0.16 · shown	7.25	3.05	69.4%
0.08	13.50	3.49	74.1%
0.035 · pinched	29.57	4.03	78.7%

7.3

EXPANSION E

 3.05_M

EXIT MACH

69%

RELEASE

 HIGH
SUPERSONIC

Shown at a deep throat, gap
 ≈ 0.16·amplitude. $\gamma = 1.2$,
 hot exhaust.

E is how much wider the opening runs than the throat. **M** is how far past sound the flow travels. **Release** is exit velocity as a fraction of the thermodynamic ceiling. Narrow the throat and all three climb together — the same arithmetic a hard season runs on a life. The interactive sheet sweeps the full range live.



02

Two Machines, One Principle

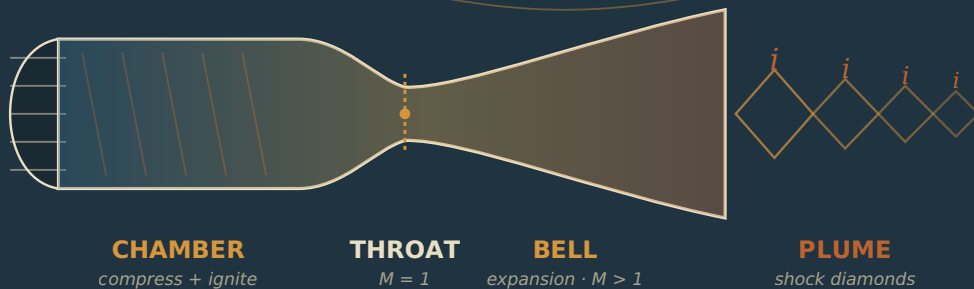
The turbojet stacks the cycle — stage after stage of compression, one ignition, then expansion through the nozzle. The rocket does it once and hard: chamber, throat, bell. Both obey the same law of compressible flow — **compress, ignite, expand** — and both reach the supersonic only after passing through the constriction.

The Turbojet MULTISTAGE · AIRBREATHING



Each stage adds a little pressure. The flow is squeezed, lit once, then handed to the nozzle to spend. Compress · ignite · expand.

The Rocket SINGLE CHAMBER · DE LAVAL BELL



One chamber, one throat, one bell. The flow can only break the sound barrier **after** the pinch. Everything downstream — including the standing diamonds — is paid for at the throat.

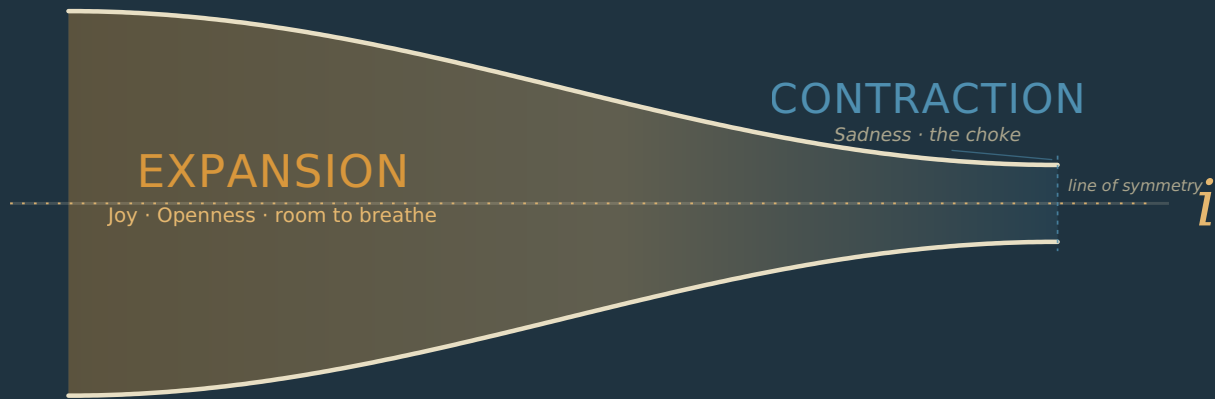
Two builds, one law. Where the wave opens, the gas expands and cools and speeds; where the wave pinches to the *i*-axis, it compresses and heats and slows to exactly Mach 1. Only past that throat can the flow run supersonic. Constriction is not the cost of thrust — it is the mechanism of it.



03

The iSight Corollary

A life runs the same spectrum. Seasons of addition are the open chambers; seasons of subtraction are the throats. The trough is not the absence of the wave — **it is the wave, signed negative**: the same function, mirrored about the axis. Honor both. The feast carries no thrust without the famine that focused it.



Two half-period cosine walls, mirror-symmetric about the *i*-axis, form a converging nozzle. The wide mouth is **expansion** — joy, openness, room to breathe. It narrows to the throat: **contraction**, the choke. Lift the wave, drop its reflection — the gap between them is a life learning to focus.

Expansion

THE CREST · JOY · OPENNESS

Joy

Addition

Feast

Life

Plenty

Contraction

THE THROAT · SADNESS · THE CHOKE

Sadness

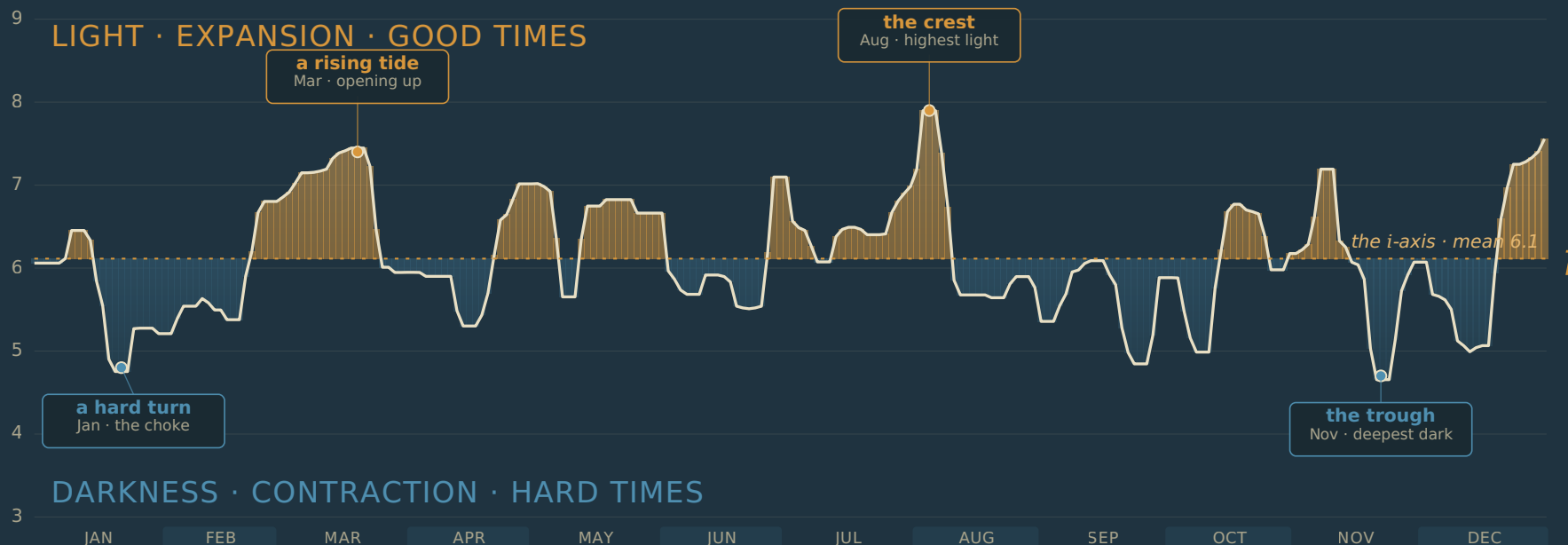
i Subtraction

Famine

Stillness

The choke

Same wave · opposite sign. **The axis between them is imaginary — and it is where the real work happens.**



LIGHT · EXPANSION · GOOD TIMES

The **amber band** is every day that rode above the mean — the crests, the open chambers. The high water marks: a rising tide in March, the highest light in August. These are the seasons of plenty, when the channel opens and there is room to breathe.

DARKNESS · CONTRACTION · HARD TIMES

The **teal band** is every day that fell below it — the troughs, the throats. The deep cuts: the hard turn of January, the deepest dark of November. Not the absence of the wave — the wave, signed negative. The same life, mirrored about the line.

One continuous wave. The mean *i*-axis sits near 6.1 of 10; the crests and troughs are the same function carried above and below it. A balanced life is not a flat line held high — it is a wave that breathes. Source: Hindsight 80/20 daily wellness record.



04

Light & Darkness

Insider Threat reads a balanced life as a single wave — light and darkness, expansion and contraction, the same function carried above and below the line. The bright crest and the dark trough are not two different things; they are one motion, mirrored. The tide rises; the tide falls; the wave continues.

Insider Threat

The philosophical memoir behind the framework — from **why** to **i**. Engineering vocabulary, imaginary numbers, and the wave theory of a life.

[Find it on Amazon →](#)amazon.com/dp/B0H218QLGH

The Tide Rises, the Tide Falls

HENRY WADSWORTH LONGFELLOW · 1880 · PUBLIC DOMAIN

*The tide rises, the tide falls,
The twilight darkens, the curlew calls;
Along the sea-sands damp and brown
The traveller hastens toward the town,
And the tide rises, the tide falls.*

*Darkness settles on roofs and walls,
But the sea, the sea in the darkness calls;
The little waves, with their soft, white hands,
Efface the footprints in the sands,
And the tide rises, the tide falls.*

*The morning breaks; the steeds in their stalls
Stamp and neigh, as the hostler calls;
The day returns, but nevermore
Returns the traveller to the shore,
And the tide rises, the tide falls.*

Longfellow's tide is the same wave: it rises, it falls, and it does not ask permission for either. The dark stanza is not a flaw in the poem — it is the middle of it. So with a life. The measured data on the previous page is this poem, plotted.



05

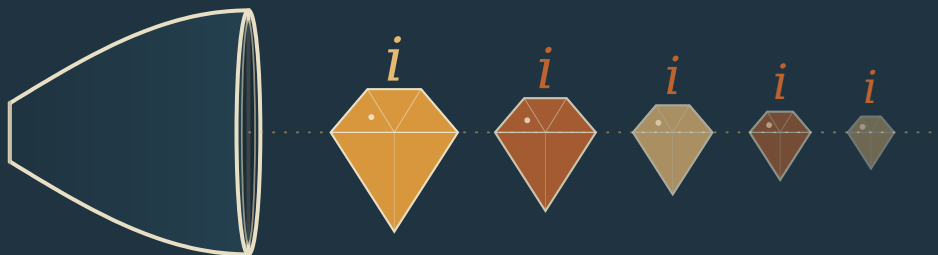
The *i*-Pockets of Diamonds

Just past the nozzle, the supersonic jet is not yet matched to the open sky — so it corrects itself in a row of bright, standing pockets: the shock diamonds. You do not see them approach; you feel the world change as you pass through one. Across that thin seam, everything jumps at once — pressure, heat, density, speed. A clean change of state. These bright pockets are the *i*-pockets: where insight changes phase.

Change of State

Born of Pressure

Cut & Faceted



AIRCRAFT NOZZLE · PRESSURE · CUT · FACET · THEY BEND THE LIGHT

the exit that opens each bright cell is a Mach disk — a shock diamond standing in the supersonic flow

Each bright cell is a Mach disk standing in the flow — compress, then expand, then compress again, every crossing a small change of state. The diamonds fade downstream as the jet finds equilibrium with the air. So do we.

Insider Threat tells it this way. The prophets — Moses among them — climb the mountain into the light, and carry the wisdom of the God of Light back down to us. In balance, other brave souls are thrust the opposite way: down into the caves of darkness, into the crushing pressure — and they return to the surface with **diamonds in their pockets**, gems that only that pressure could make, to share with the world. And if we listen to those souls, and take the hard lessons and **cut and facet these diamonds carefully**, they bend the light we already love into a dazzling display — never seen before — a transformative, hypersonic, state-altering experience.

For those who went down into the mines for their diamonds and never made it back to the surface — **we love you, and we carry the light you went looking for.**

And for anyone still down there in the dark right now: you do not have to climb out alone. The tide turns. The wave continues. Please reach out.

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iSight Hub

ASIP → iSIP Framework

MmM Flight Test

Free Assessment

Level-2 Deep-Dive

From why to *i*. The wave continues.