



RESUME: SAW Simple Wins Concepts LLC / Steven J. McGee Consultant, patent applicant

June 2004 - Simple Always Wins Concepts LLC incorporated – a woman owned micro-business. Owner's father is Blackfoot Indian. Web Page [LINK http://sawconcepts.com/index](http://sawconcepts.com/index)

United States Army Signal Corps Officer ROTC Full Scholarship Recipient 1982-1993

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Defense Contractor for Validity Systems, SAIC International, MITRE, BAE Systems 1993 – 2002

United States Patent and Trademark patent application #13,573,002 2004-17 [LINK](#)

WEB: [LINK http://sawconcepts.com/index](http://sawconcepts.com/index) LINKEDIN: <http://linkedin.com/in/sawconcepts> [LINK](#)

GITHUB: [LINK: https://github.com/Beacon-Heart/Heart_Beacon](https://github.com/Beacon-Heart/Heart_Beacon)

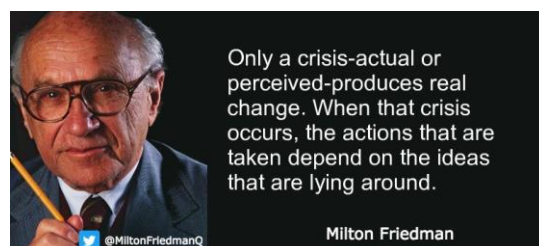
PATREON: [LINK https://patreon.com/beacon_heart](https://patreon.com/beacon_heart) OneDrive Document [Folder](#)

SCRIBD <https://scribd.com/user/11781571/Steven-McGee> [LINK](#)

TWITTER: http://twitter.com/Heart_Beacon Medium: <https://medium.com/@heart.beacon.cycle>

Quantum computing / Heart Beacon Cycle Time – Space Meter Sct Alice V CLS Bank [meme](#)

Economist Milton Friedman's K% Rule Eco-Economic Heartbeat [LINK](#)



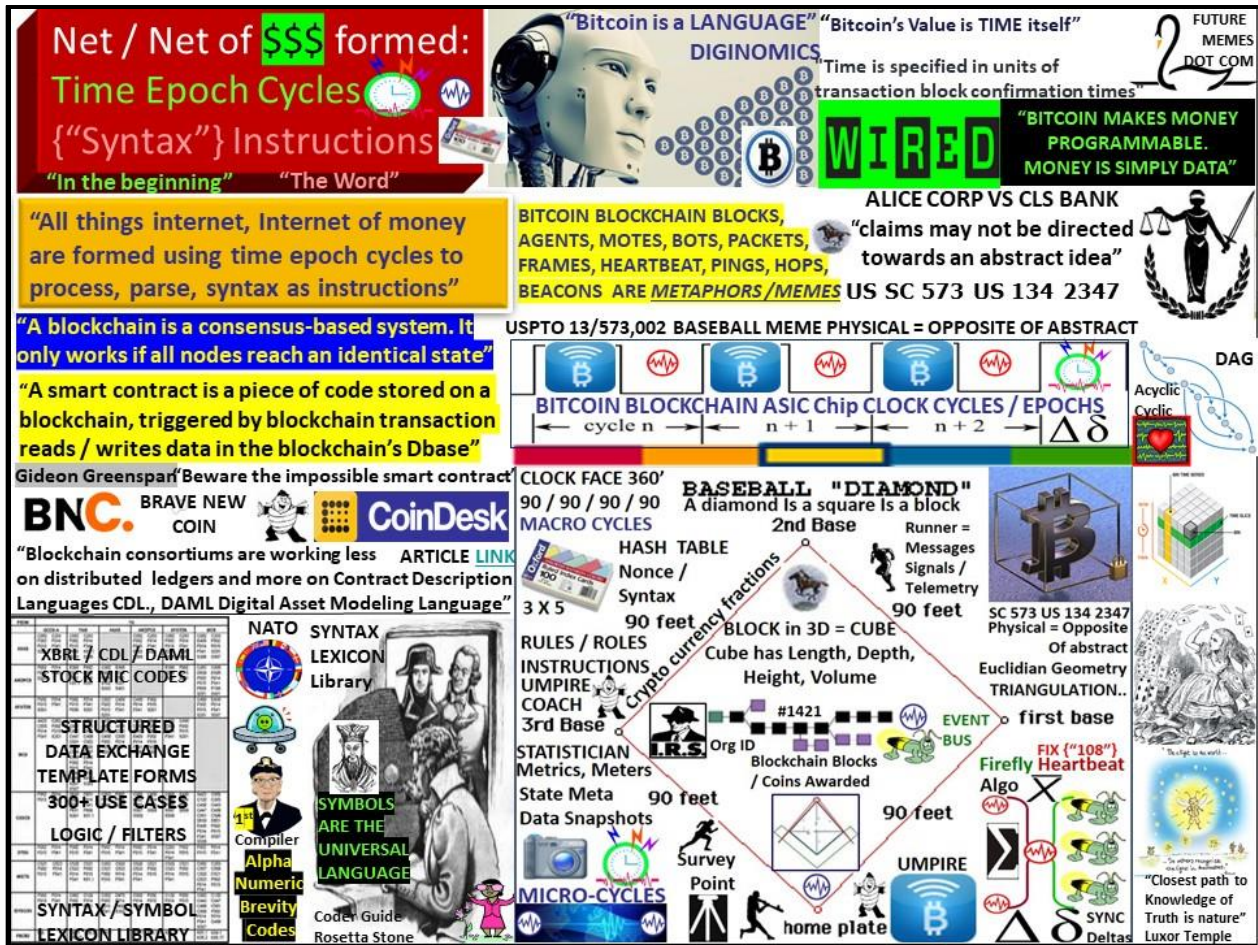


FIGURE 1: Supreme Court Alice Corp Vs CLS Bank “claims may not direct towards Abstract ideas” [LINK](#)

Speaking of Alice through the looking glass and Wonderland... “It’s a new world order in the aftermath of Alice,” says Dale S. Lazar, a partner in DLA Piper’s Reston, Virginia, office. [LINK](#)

"In the US, Crypto Is considered property by the Internal Revenue Service, Money by the Treasury Department, Commodities by the CFTC, and securities by the #SEC"

Bitcoin blockchain blocks, agents, motes, bots, heartbeat, beacon are metaphors for intervals, time cycles available to process / not process SYNTAX. The internet is coded, programmed using time cycles to process instructions, commands etc. It follows that the key to achieving consistency, interoperability among myriad memes and establishing a consistent, systemic one world economic system of systems is to focus on two main common building blocks -- time cycles and syntax. Alice Corp. v. CLS Bank International, 573 U.S. 134 S. Ct. 2347 (2014), United States Supreme Court decision about patentable subject matter (patent eligibility). The patents were held to be invalid because the claims were drawn to an abstract idea, and implementing those claims on a computer was not enough to transform that idea into patentable subject matter. In our opinion, physical is the opposite of abstract. [LINK](#) WIKIPEDIA: https://en.wikipedia.org/wiki/Alice_Corp._v._CLS_Bank_International



FIGURE 2: FEDCOIN / WORLD COIN ECONOMIC HEARTBEAT

Economic Reset solution: form economic trade federations incentivizing environment friendly business practices leveraging Bitcoin's micro-payment capabilities supporting the TERRA Trade Reference Currency TRC demurrage resource handling charge. Closer is cheaper, less fuel, less CO2 carbon emissions

- Firefly Heartbeat algorithm Time – Space Sync algorithm improved by matching firefly async / sync process to closest Operational Tempo OPTEMPO heartbeat time epoch cycle
- TERRA TRC TRADE REFERENCE CURRENCY Commodity (crops etc., backed)
- WAVES: TOKENIZES NATIONAL CURRENCIES / I.R.S. Bitcoin transactions as taxable events
- ECONOMIST MILTON FRIEDMAN'S K% RULE Lead Economic Indicator economic pulse

SOURCE [LINK: http://www.sawconcepts.com/index/id9.html](http://www.sawconcepts.com/index/id9.html)



FIGURE 4: FIREFLY INSPIRED HEARTBEAT SYNCHRONIZATION / World Economic Heartbeat

Firefly Inspired Heartbeat Synchronization Algorithm:

- 1) Consensus 2) Neural Network emulation 3) Event Bus for Bitcoin transactions as taxable events
- 4) Stochastic Harmonization 4) Collect stock exchange events for MMID Dark pool limits

Firefly inspired Heartbeat Synchronization: in a paper entitled Firefly-inspired Heartbeat Synchronization in Overlay Networks by the University of Bologna Trento Italy along with the University of Szeged, Hungary: "Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local "heartbeat" events approximately at the same time. The heartbeat synchronization protocol for overlay networks is inspired by mathematical models of flash synchronization in certain species of fire flies. Nodes send flash messages to their neighbors when a local heartbeat triggers. Fireflies adjust the phase of their next heartbeat based on incoming flash messages using an algorithm inspired by mathematical models of fire-fly synchronization. Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local "heartbeat" events approximately at the same time. It differs from classical clock synchronization in that nodes are not interested in counting cycles and agreeing on a ID of a current cycle. There is no requirement regarding the length of a cycle with respect to real time as long as a length is bounded and all nodes agree on it eventually.

[LINK http://sawconcepts.com/index/id22.html](http://sawconcepts.com/index/id22.html)



FIGURE 7: Swords to plowshares: Battlefield digitization Distributed Autonomous Organization process to form Trade Federations for equitable, eco-sustainable economics, econometrics

The term DAO Distributed Autonomous Organization was coined by military think tank RAND in 2001. German military advocated using Battlefield Digitization for OOTW Operations Other Than War in 2004

In 1921, Edison / Ford proposed a crop index based currency. Now there's the internet, the internet of money #Bitcoin Blockchain & Spatial Econometrics The Terra is a global complementary currency designed to provide an inflation-resistant international standard of value; to stabilize the business cycle on a global level; and to realign stockholder's interests with long-term sustainability. From a legal viewpoint, the Terra is standardized "countertrade" (international barter), which is routinely used for over one trillion dollars worth of transactions per year. Legislation on countertrade exists in about two hundred countries, including all the major trading nations. Introducing the Terra would therefore not require new international governmental agreements. Bitcoin blockchain micro payments pair perfectly with the TERRA TRC's demurrage charges to offset costs for temporary storage and transfer of goods. The TERRA Trade Reference Currency: complementary, privately issued, demurrage-charged, backed by inflation-resistant, standardized basket of the dozen most important commodities, services and operates in parallel with national currencies. Terra The Trade Reference Currency, TRC "world currency". Proposed by Belgian economist and expert on monetary systems Bernard A. Lietaer in 2001, the currency is meant to be based on a basket of the 9-12 most important commodities (according to their importance in world wide trade). Terra = reference unit defined as standardized basket of lead economic indicators / commodities SOURCE [LINK](http://sawconcepts.com/index/id36.html) <http://sawconcepts.com/index/id36.html>



FIGURE 9: Electronic Government as a Service / Heart Beacon Cycle synergy

Cyclic updates of state meta data snapshots / heartbeat messages from micro-to macro (economic) cycles distributed among a system of systems is simply powerful. The Internet is based on time cycles and (computer) syntax parsed / processed or not during finite time cycles. It requires a syntax library lexicon -- a Rosetta Stone if you will. The firefly inspired heartbeat algorithm includes flash heartbeat messages that act as a universal event / alert message bus.

eGaaS, an international Blockchain platform for organizing the economic, state and social activities of citizens and their communities on the basis of smart law and smart contract system Electronic Government as a Service.

eGaaS implements four basic functions needed for efficient transfer of most types of government, legislative bodies and business activities into Blockchain technology:

- financial system
- registry structure
- smart contract algorithm
- smart law formation and execution mechanism

In eGaaS a mechanism is implemented for formation and execution of smart laws. Smart laws are algorithms describing the rules and conditions regulating the execution of state laws.

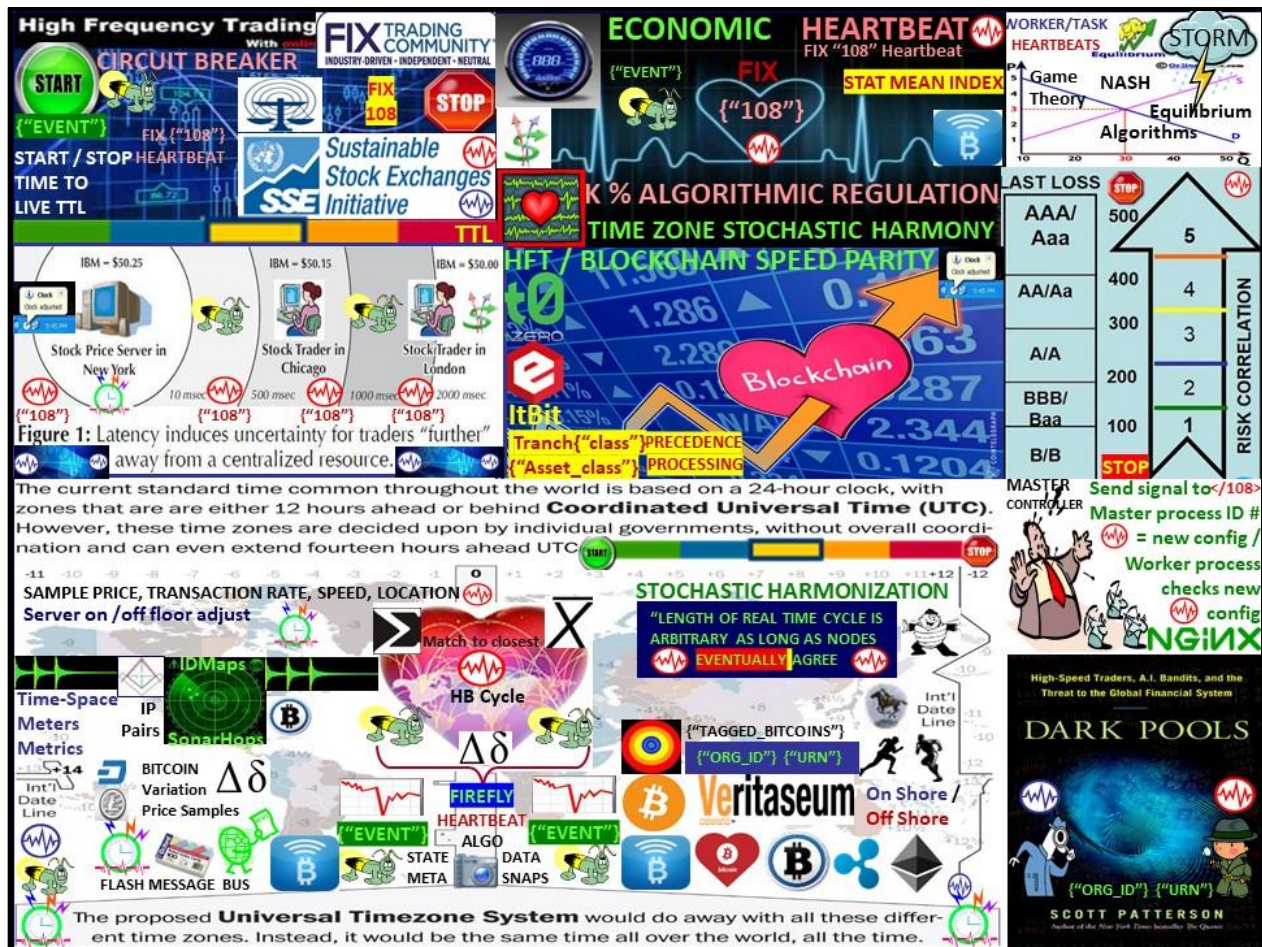


FIGURE 10: HFT CIRCUIT BREAKER / Blockchain transaction speed algorithmic regulation [LINK](#)

Algorithms drive markets but do not regulate them = Napoleon @ Waterloo Groundhog's Day

#MFID #DARKPOOL #HFT High Frequency Trade Limits: #Sustainable #Stock #Exchange Initiative

Use the "Great John Nash's" Equilibrium algorithms to address trade parity among "whales"

US Sct #573 Alice Corp Vs CLS Bank "claims may not direct towards abstract ideas" = physical sonar water drop in pond meme for radius distance from stock, commodity exchange trade floors

Firefly inspired heartbeat synchronization algorithm use cases in stock, currency, commodity exchanges: algorithmic regulation. Improving temporal trade parity between Bitcoin Blockchain & conventional stock exchanges by using the firefly-heartbeat algorithm to take trade speed samples among trade populations across time zones to determine an optimal trade speed / frequency as a statistical mean value index pulse. On off trade floor parity = sonar water drop in pond meme radius distance / Dark Pool circuit breaker #UTZ universal time zone stochastic harmonization #Bitcoin World #Economic #Heartbeat <http://sawconcepts.com/index/id18.html>
[LINK](#) See USPTO 13/573,002

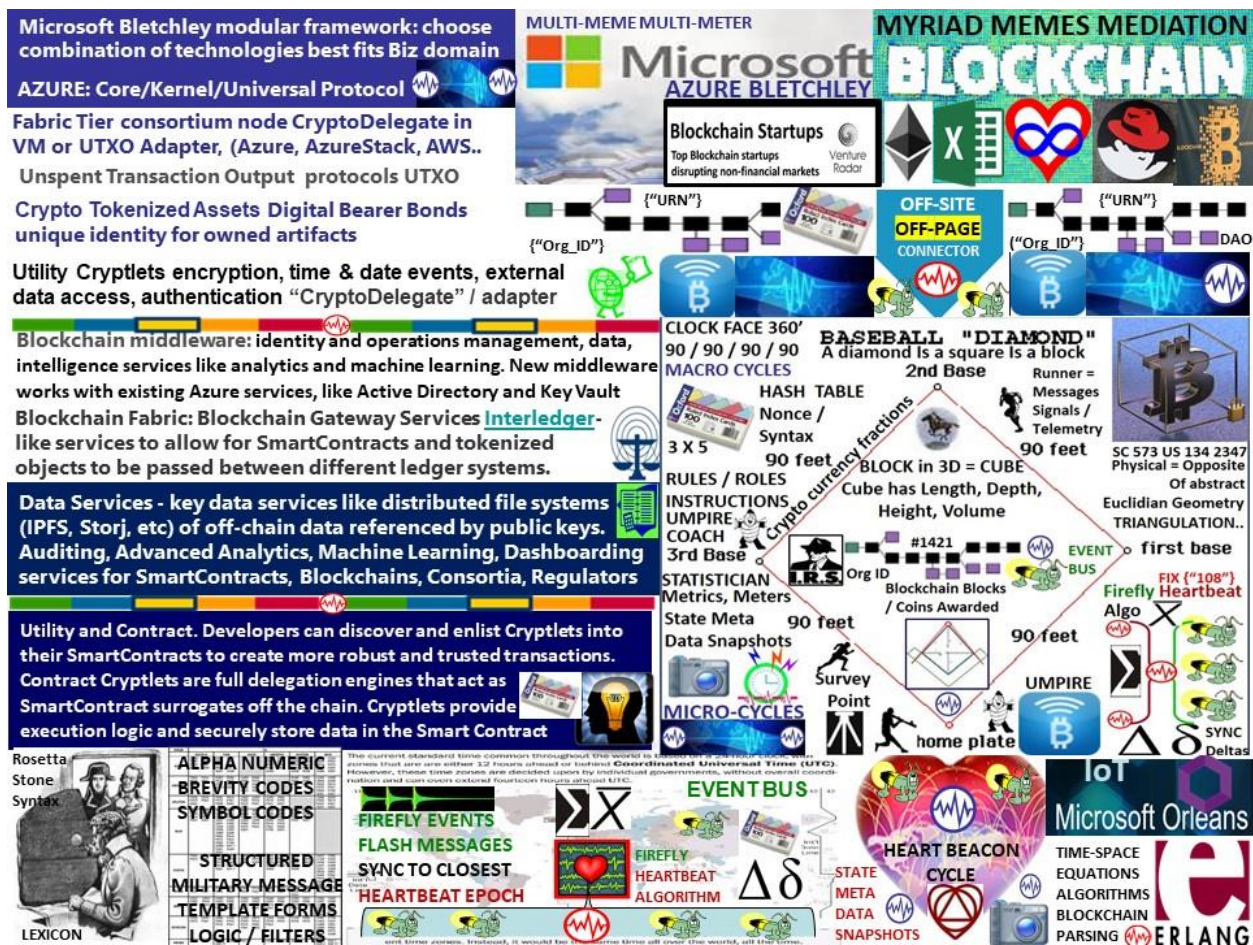


FIG 11: MICROSOFT BLETCHLEY BLOCKCHAIN AS A SERVICE BAAS / HEART BEACON CYCLE [LINK](#)

Quote from @DCCCertified @InsideBitcoins "Build mental models that help people wrap their heads around Bitcoin w/o having to understand it". A baseball diamond is a square, is a block. A baseball tournament is played on baseball diamonds are physical and tangible -- in every town in America. The opposite of abstract is physical.

US Supreme Court Alice Corp V CLS Bank: "claims ineligible for patent protection under 35 U. S. C. §101 "directed to an abstract idea" ALICE CORP v CLS BANK <http://1.usa.gov/1V91pQe> [LINK](#)
 Patent application 13,573,002 is described using a baseball league tournament. [LINK](#)
<http://slideshare.net/StevenMcGee2/13573002-the-heart-beacon-cycle-patent-application>

NATO's **#interoperability** system of systems framework i.e., sync delta's, structured data exchange alpha numeric brevity codes, symbol sets... is the best starting point - in my opinion. **#Coindesk**: The Opportunity for Interoperable Chains of Chains [LINK](#)



Figure 12: Hashgraph” / Heart Beacon Cycle Time – Space Meter Synergy

Web [Page](http://www.sawconcepts.com/index/id91.html): <http://www.sawconcepts.com/index/id91.html>

Hashgraph: Abstract. A new system, the Swirls hashgraph consensus algorithm, is proposed for replicated state machines with guaranteed Byzantine fault tolerance. It achieves fairness, in the sense that it is difficult for an attacker to manipulate which of two transactions will be chosen to be first in the consensus order. It has complete asynchrony, no leaders, no round robin, no proof-ofwork, eventual consensus with probability one, and high speed in the absence of faults. It is based on a gossip protocol, in which the participants don't just gossip about transactions. They gossip about gossip. They jointly build a hashgraph reflecting all of the gossip events. This allows Byzantine agreement to be achieved through virtual voting. Alice does not send Bob a vote over the Internet. Instead, Bob calculates what vote Alice would have sent, based on his knowledge of what Alice knows. This yields fair Byzantine agreement on a total order for all transactions, with very little communication overhead beyond the transactions themselves. Hashgraph is event based and involves calculating consensus based on activity snapshots in a given moment in time (HBC)

SOURCE: THE SWIRLDS HASHGRAPH CONSENSUS ALGORITHM: FAIR, FAST, BYZANTINE
FAULT TOLERANCE AUTHOR: LEEMON BAIRD BAIRD@SWIRLDS.COM
MAY 31, 2016 SWIRLDS TECH REPORT SWIRLDS-TR-2016-01



FIGURE 13: IOTA TANGLE / DAG Directed Acyclic Graph / Heart Beacon Cycle Time – Space Meter synergy

The Tangle is based on the concept of a Directed acyclic graph DAG. A directed acyclic graph (DAG!) is a directed graph that contains no cycles. A rooted tree is a special kind of DAG and a DAG is a special kind of directed graph. The DAG **consists of finitely many vertices and edges, with each edge directed from one vertex to another, such that there is no way to start at any vertex V and follow a consistently-directed sequence of edges that eventually loops back to V again. Equivalently, a DAG is a directed graph that has a topological ordering, a sequence of the vertices such that every edge is directed from earlier to later in the sequence.** IOTA TANGLE SOURCE: [IOTA - Next Generation Blockchain https://iota.org](https://iota.org)

The Heart Beacon Cycle Time - Space meter describes an improvement to an acyclic algorithm based on firefly synchronization that uses the median / mean of the firefly heartbeat synchronization algorithm to strive to sync to the closest OPTEMPO Heart Beacon Cycle.

Firefly inspired heartbeat synchronization theory / algorithm See slide #22 [LINK](#)

FROM

GCCS-A

C002 C203
F002 F014
F015 F541
S201 S309

ASAS

FEDERATED MISSION NETWORKING

NATO FMN

FEDERATE SHARE

ALPHA-NUMERIC BREVITY CODES

USMTF / XML MTF FORMATTED

MESSAGE CATALOG = 300 + messages

info exchange sets using common, **CONSENSUS** Message Text Formats

MTFs. MTFs specify **</CONTENT>** / info agreed by group consensus presenting information in a logical, well specified unambiguous layout resulting in a **highly efficient info payload to overhead ratio**

CODE GUIDE

ATDS

C203 C203
F014 F014
F541 F541
S305 S305
S309 S309

MCS

C002 C203
E400 E400
F014 F015
F541 S201
S309 S507

INFOCON

4 3 2 1

INFORMATION CONDITION

"SYMBOLS RULE THE WORLD"

Information Elements Roles

- COI Determination Org Interaction
- Search and Discovery
- Ontologies STANDARDS
- Taxonomies REFERENCE
- Metadata Attributes / Filters ('Org_ID') {'URN'}

FILTERS

FFUDN: Field Format Unit Designator #

FFIRN Field Format Index Reference #

Structured military messaging ID's

messages, message sets, data element, symbol fields

BY Form Field Position & NUMBER

Firefly-Heartbeat Flash Messages

PROCESS MESSAGE BY PRECEDENCE

UNIVERSAL EVENT / ALERT MESSAGE BUS

MESSAGE CATALOG

300 + Use Cases

Object Categories	Examples
OOB	SYNTAX LEXICON
Infrastructure	Comm, power, transportation, water/sewer
Sociological	Culture, religion, economic, ethnic, government, history, languages
Geophysical	Terrain, weather, climatology, oceanography, astrometry

Data Elements: entity, attribute, relationship equivalents

HEARTBEAT MESSAGE = K00.99

Information Categories and Examples

Location	Movement	Identify	Status	Activity	Intent
lat/long	spd/hdg	country / alliance, type/class	readiness	targeting, reconitering	COA {"Java JS"}
Machine Trust Language MTL					

CDL Contract Description Language

YAML

OPERATIONAL NODES / ACTIVITIES

DATA	SYSTEM FUNCTIONS	PERFORMANCE
11.4 - Classification	11.8 - Kinematics	
11.4.1 - Category	11.8.1 - Pos / Vel / Acc (PVA)	
11.4.1.1 - Confidence Level	11.8.1.1 - Acceleration	
11.4.1.2 - Estimate Type	11.8.1.1.1 - Angular	
11.4.1.2.1 - Alternative	11.2 - Linear	
11.4.1.2.2 - Evaluated D	2 - Estimate Type	
11.4.1.3 - Value	1.2.1 - Estimated	
	1.2.2 - Observed	
	1.2.3 - Predicted	
	1.2.4 - Smoothed	
SYMBOL	Friend	Neutral
2525C	Partner	Competitor
11.4.1.3.5 - Surface	4 - Velocity	
11.4.2 - Platform / Point / Feature Type	1.4.1 - Horizontal	
11.4.3 - Specific Type	1.4.2 - Vertical	
11.4.4 - Type Modifier	1A - Confidence	
11.4.5 - Unit	1 - Bearing Angle	
	2 - Bearing Angle Rate	
	3 - Covariance Matrix	

Figure 14: The Next Web based on Syntax Lexicon Library Rosetta Stone adapted swords to plowshare from [NATO](https://www.nato.int)

The Next Web TNW: a common syntax library of various Message Text Formats MTF to enable universal signaling / telemetry among a system of systems is ESSENTIAL. Decades of research at the taxpayer's expense into structured messaging / structured data exchange where the location, type of data identified by table number will help accelerate the process of organizing syntax into categories from disparate systems into data set reference repositories. Many semantic, syntax tags will be reusable. The rules, roles and logic developed by years of research involving of thousands of subject matter experts solving real world issues is the value to be extracted from the 300+ message sets. NATO stays synchronized across many languages and cultures so why reinvent the wheel?

MESSAGE CATALOG: The USMTF message library has over 300 messages to choose from to facilitate information exchange requirements. MTFs presenting data in a logical, well specified and unambiguous layout. MTFs are transmission medium neutral. The content of the Message Catalogue has been developed by military operators over the last 20 years. Messages are regularly maintained to keep pace with the latest tactics and doctrine.

Military brevity codes and stock exchange codes are similar. security Identifier used in financial markets are: SYMBOL, CUSIP, ISIN, SEDOL, RIC Code, Security Identifiers

LINK: <http://sawconcepts.com/index/id44.html> Syntax Lexicon Library Rosetta Stone

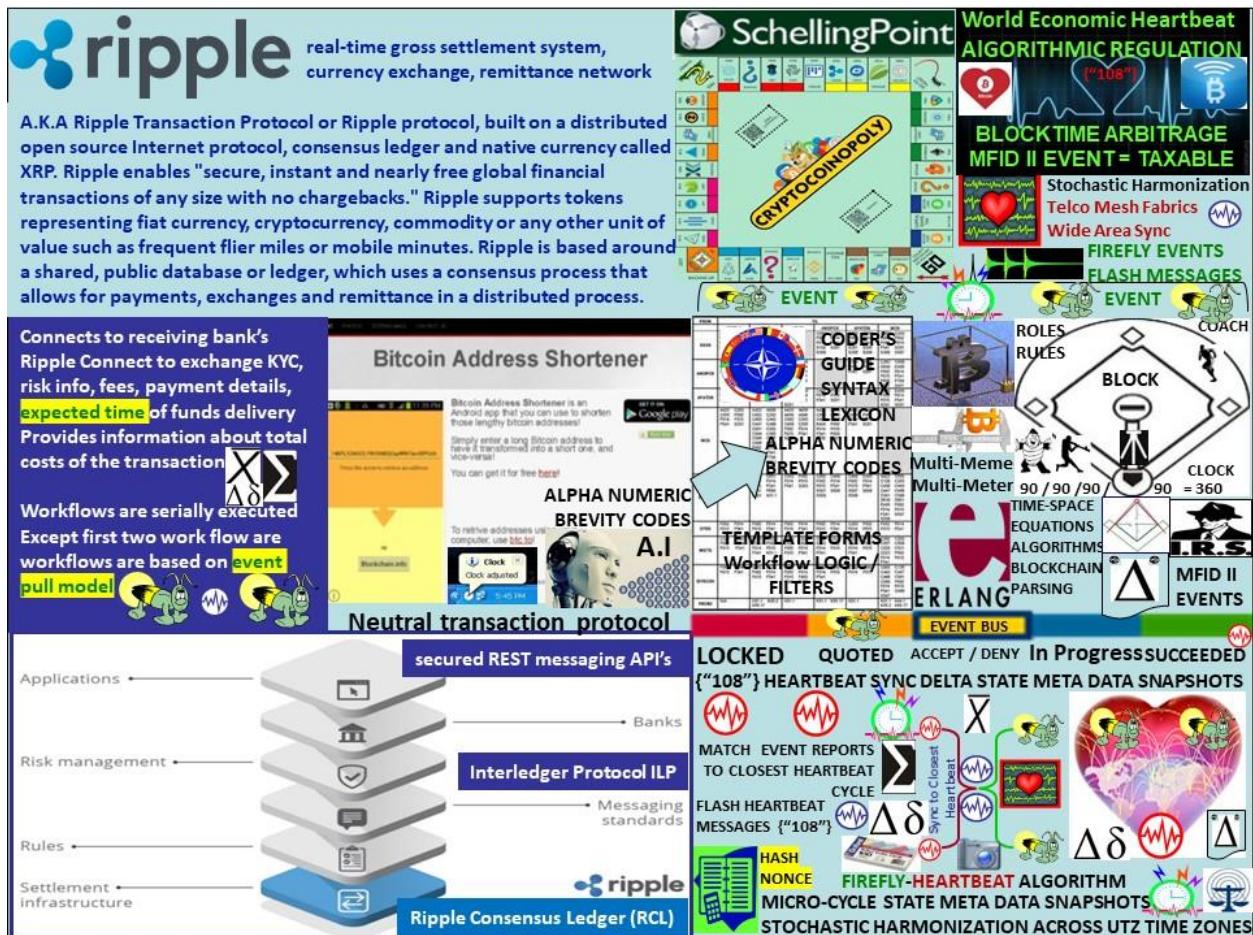


FIGURE 16: RIPPLE RTP / Heart Beacon Cycle Time – Space Meter synergy

Quote from @DCCertified @InsideBitcoins "Build mental models that help people wrap their heads around Bitcoin w/o having to understand it". A baseball diamond is a square, is a block. A block is awarded using age (time) or vectors (time / direction / velocity) or voting (tournament league board). A baseball tournament is played on baseball diamonds that are as physical and tangible as it gets -- in every town in America.

SEE MFID II TAX CODE RULING: Bitcoin A to B to C to N Bitcoin transactions are taxable events

US Supreme Court Ruling Alice Corp V CLS Bank: "claims ineligible for patent protection under 35 U. S. C. §101 "directed to an abstract idea" ALICE CORP v CLS BANK <http://1.usa.gov/1V91pQe> LINK

The Heart Beacon Cycle patent application 13,573,002 is described using a baseball league tournament. A land use meme and internet survey techniques to define geo-spatial temporal areas in time – space will be helpful in determining the percentage of a coin bought or sold and who, where, when, how much, of a Bitcoin was transacted in context with I.R.S memo 1421 on Bitcoin that deems it property when purchased by a client.

Reference: Patent application # 13,573,002 Heart Beacon Cycle Time - Space Meter

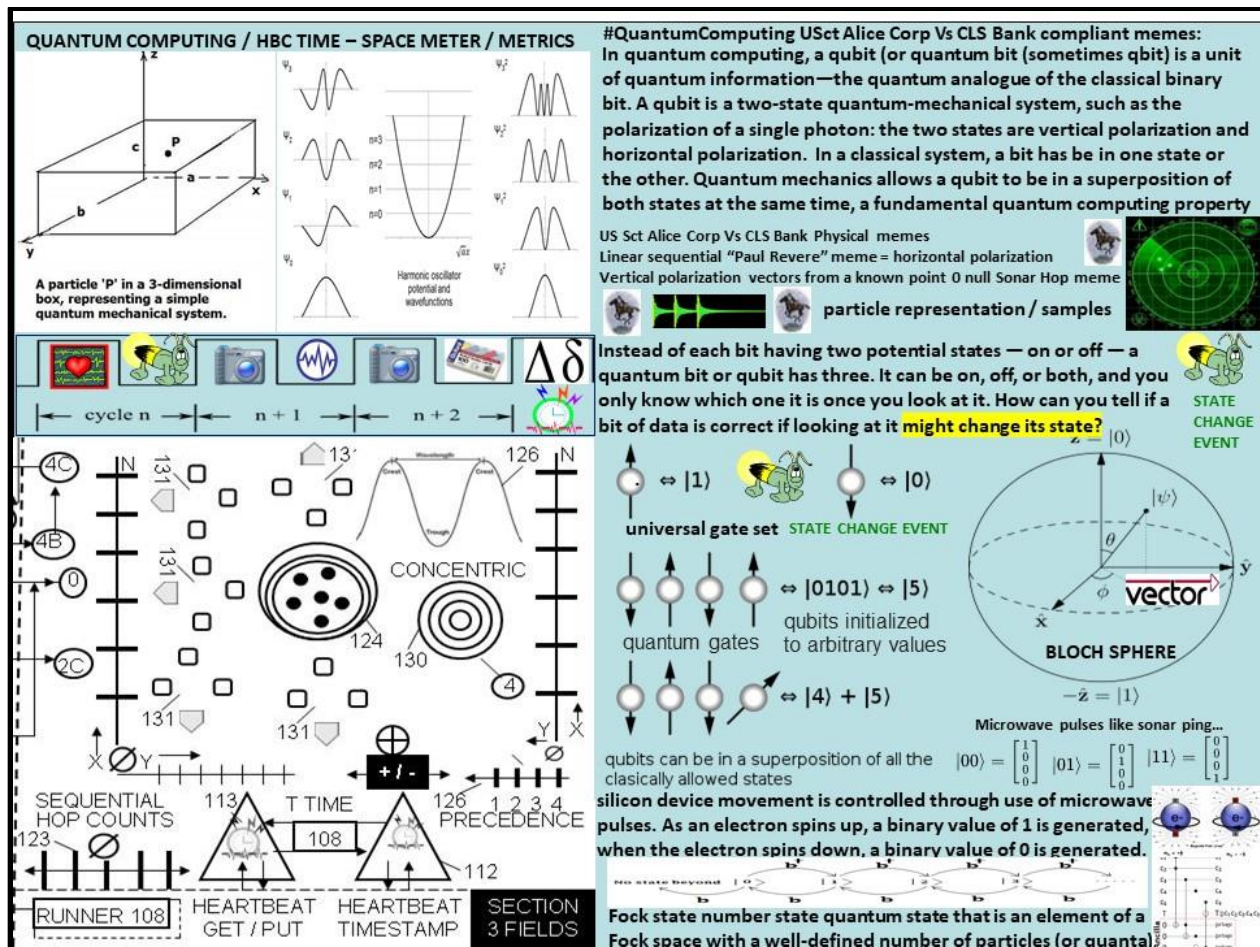


FIGURE 17: QUANTUM COMPUTING / Heart Beacon Cycle Time – Space Meter US Sct Alice V CLS Bank meme

Quantum computing studies theoretical computation systems (quantum computers) that make direct use of quantum-mechanical phenomena, such as superposition and entanglement, to perform operations on data. Quantum computers are different from digital electronic computers based on transistors. Quantum computer: a computer which makes use of the quantum states of subatomic particles to store information.

In **quantum computing**, a **qubit** or **quantum bit** (sometimes **qbit**) is a unit of **quantum information**—the quantum analogue of the classical binary **bit**. A qubit is a **two-state quantum-mechanical system**, such as the **polarization** of a single **photon**: here the two states are vertical polarization and horizontal polarization. In a classical system, a bit would have to be in one state or the other. However, quantum mechanics allows the qubit to be in a **superposition** of both states at the same time, a property that is fundamental to quantum computing. QUBIT: <https://en.wikipedia.org/wiki/Qubit>

The Heart Beacon Cycle Time – Space Meter USPTO 13/573,002 is a universal method and means to provide geo-spatial temporal intensity metrics in meters for example with an telecommunications mesh fabric using Euclidian geometry and Japanese paper folding Origami techniques to represent unusual geo-spatial sampling areas. The firefly inspired heartbeat synchronization algorithm provides asynchronous method to report observed events that are reported via a universal heartbeat synchronous time cycle event bus that is both product and protocol neutral.