

MODES MATTER

ELIMINATING OBSOLETE SIGINT SOFTWARE

IS OUTDATED SIGINT TECHNOLOGY HANDING YOU MORE QUESTIONS THAN ANSWERS?



COMINT CONSULTING HAS THE SOLUTION

CHANGING ENVIRONMENT

SIGINT is changing every moment. Simple send-and-receive messaging is clearly old news because today's targets have sophisticated modes at their fingertips.

TODAY

It's a whole new world.

RIGHT SOLUTIONS

Today's most innovative answer is the Krypto500 elite decoding software suite created by SIGINT officers who knew that state-of-the-art, responsive intelligence tools should be in the hands of the people who needed them most.

IS SIGINT STILL RELEVANT?

OLD SOLUTIONS

Incredibly, SIGINT solutions haven't kept pace. They're mired in Cold War thinking about communication, creating confusion, wasted time and lost opportunities:

- Signal decoders and analyzers are released at a glacial pace and updated rarely.
- Signals are misidentified while obsolete modes are listed as active.
- Processing capacity is limited to one channel, and decoders produce unusable outputs.

NEW SOLUTIONS

We know you can't afford to miss a detail, so we continually create the most advanced tools possible for today's complicated RF environment.

WE KNOW YOU CAN'T AFFORD TO MISS A DETAIL, SO WE CONTINUALLY CREATE THE MOST ADVANCED TOOLS POSSIBLE FOR TODAY'S COMPLICATED RF ENVIRONMENT.

THE COMINT CONSULTING ADVANTAGE

After years of detailed collection, analysis and testing, we can confidently say that

WE KNOW WHAT YOU'RE NOT HEARING

If you're considering advanced decoding software, ask your representative, "Can your software do this?"

Offer TWO TIMES more modes than the competition (and we're not stopping there!) - with 3-4 more added each month. That's more than the competition has created in their 30-40 years in business.

Accurately identify only current, legitimate modes and all of their variants (see mode report below)

Keep 10 instances of our decoder running while staying under 10% CPU usage

Run 32 decoders on one channel and run up to 10 instances of Krypto500 or Krypto1000 on an i3, i5 or i7-class CPU for an unprecedented capability of 320 active decoders

Operate fully under extreme SWaP (small weight and power) requirements for low-power, leave-behind and alternative power situations - solar, battery, wind, UAV, UUV, USV, unmanned remote, etc.

Perform worldwide ELF-SHF collection and analysis 24 hours a day, 7 days a week

Have reliable, up-to-the-minute intelligence, continuously verified

Provide in-depth, unequalled signal classification that specifically categorizes almost 4,000 signaling systems - offering 150 times the detail of the competition

Identifies specific equipment, specific variants and submodes of that equipment - and specific users

MODE MISTAKES

WHEN WE STARTED BUILDING KRYPTO500, WE WERE STARTLED WHEN OUR RESEARCH REVEALED MANY PROBLEMS WITH THE "LEADING" SIGINT SOFTWARE:



- MISIDENTIFIED SIGNALS
- PARTIAL OR OUTDATED SOLUTIONS
- BASIC ERRORS SUCH AS CARRIER FREQUENCY (CF) AND MEASUREMENT OF SHIFT
- OFF-AIR SIGNALS (FOR YEARS!) LISTED AS ACTIVE
- ONLY 3-4 HF CALLING SYSTEMS WHEN 80+ ARE ON AIR

IF YOUR SOFTWARE CONTAINS THESE SIGNAL LISTINGS, YOUR SIGINT IS SUFFERING:

• Alcatel 801H			Off air
• ALE400			Amateur radio mode
• ALIS	• RS-ARQ	• ALIS1	All incorrect names. There are actually 6 submodes of ALIS and we do ALL 6 - other software cannot identify them
• ALIS-1	• MERLIN	• ALIS-2	
• ALIS2	• RS-ARQ2		
• ARQ6-90	• ARQ690	• ARQ698	Off air more than a decade
• ARQ6-98	• ARQ-M2	• ARQ-M2-242	
• ARQ-M2-342	• ARQ-M1	• ARQ-M4	
• ARQ-M4-242	• ARQ-M4-342	• ARQ-N	
• TDM 242	• TDM 342	• ARQ-28	
• ARQ-58	• CCIR 242	• CCIR 342	
• AUM-13	• NUM-13	• SP14	Off air, and they have been superseded by modes in Krypto500 and 1000
• SP-14			
• AUTOSPEC	• SPREAD 11	• SPREAD 12	Off air more than a decade
• CIS 14	• SPREAD 51	• BF6 BAUDOT	
• BAUDOT-F7B	• ITA2 Twin		
• BULG-ASCII	• IRA-ARQ	• SCII-ARQ	Off air
• ITA5-ARQ			
• AMTOR	• AMTOR A	• AMTOR ARQ	Wrong name. Sitor-A is the common name
• CCIR 476	• CCIR 476A	• CCIR 476 B	
• SITOR-ARQ	• ARQ		
• AMTOR	• AMTOR B	• AMTOR FEC	Wrong name. Sitor-B is the common name
• CCIR 476	• CCIR 476B	• SITOR-FEC	
• FEC	• TOR Dirty	• NAVTEX	
• CHU			We don't include solutions to clocks broadcasting on Shortwave in our SIGINT suite
• CCIR493-4			Some will tell you this is the same as the Codan Selcall, which does not account for the half-dozen variants of this on-air
• CIS-12	• FIRE	• MS5	Wrong name. There are 13 inputs and 2 waveforms, and we do them ALL. The competition performs NONE correctly and produces unusable outputs
• CIS 11	• TORG 11	• CIS 10 11 11	Wrong name; traffic parsed incorrectly
• CIS 14	• TORG 14	• AMOR 96	
• CIS 405-395	• CIS 405-3195	• 405-395	
• Frost1	• Frost-1		
• CIS-20			Wrong name. Some software identifies this as CIS-12, but they are two completely different pieces of equipment and modes with different sets of waveforms and users. Unusable output
• CIS-36	• 36-50	• 50-50	Wrong names; traffic is incorrectly parsed. Competition cannot identify Navy, VGK (General Staff) or AF users. We can, and we parse them ALL correctly
• CIS 36-50	• BEE	• CIS 50-50	
• CIS 81	• CIS 81-81	• CIS 81-29	Wrong names, traffic not parsed correctly
• 81-29	• 81-81	• FROST	
• Codan selcall	• Codan 8580		See CCIR493-4 comments above. Several variants and clones - about a half-dozen - we do them all
• COQUELET-8	• Coquelet-8 FEC	• Coquelet-80	Wrong name. Actual name Coquelet MkII; all off air
• Coquelet-8 ECC			
• Coquelet-13			Actual name Coquelet Mk1; Off air
• Coquelet-100			See Alcatel 801H above
• Crowd36			This mode has not been used since 1999
• DGPS			We process several, specific DGPS standards (there are dozens), including some with military-only applications. The competition processes none
• DUP-ARQ	• DUP-FEC	• DUP FEC 2	Off air
• DUP-ARQ2			Incorrect name. It has 3 subfunctions - we do them all, other software does NONE correctly
• FEC-A	• FEC-100	• FEC-12	Incorrect names; off air
• VISEL	• YUG-MIL		
• FELD HEL	• FM HELL		Amateur radio modes
• FSK 400/500			Incorrect name; several submode waveforms missing
• GW-FSK	• Globe Wireless FSK		Incorrect names and mode is being replaced already in 2014, so will be off air soon. Replacement is already on-air
• GW-Datplex	• Globe Wireless PSK		
• GW-PSK	• Globe Wireless Pactor		
• GW-Pactor	• GW-OFDM		
• G-TOR			Most proprietary does not handle ARQ, FEC and proprietary variants, nor adaptive speed changes
• HFDL	• HFDL-PSK		Correct name ARINC635 HFDL
• HNG-FEC			Off air many years
• MERLIN			Wrong name. This is the name of middleware, not a signal or modem
• MFSK16	• MFSK20		There is a new variant of both and BOTH are in Krypto500; the competition covers only old variants
• MFSK-8			Amateur mode
• OLIVIA			Amateur mode with many submodes; most software does not process them
• Packet 300			Actual name X.25 Packet; there are several proprietary variants on-air, NONE handled by other software
• Piccolo Mk6	• Piccolo-6		Correct name Piccolo Mk I; off air
• Piccolo Mk12	• Piccolo-12		Correct name Piccolo Mk II; off air
• Pol-Arq	• ARQ-POL	• CCIR 518 variant	Off air many years
• PRESS-FAX			Unsuitable for a SIGINT software suite; off-air many years
• PSK10	• PSK31	• PSK63	All amateur modes
• PSK125	• PSK220	• PSK250	
• RAC-ARQ	• RACAL-ARQ	• MEROD	All incorrect modem names; MEROD is the name of the data entry terminal! Several variants are on-air
• RUM-FEC	• ROU FEC	• SAU-FEC	Off air many years
• Saud-FEC			
• Si-ARQ	• SI-AUTO (etc)	• SPREAD-11	All incorrect names; all off air many years
• SPREAD-21	• SPREAD-51		
• SSTV			All amateur modes; useless to SIGINT professionals
• SWED-ARQ	• ARQ-SWE	• CCIR 518 variant	Off air many years
• TWINPLEX	• TT2300	• TT2300b	
• T-Plex			

KRYPTO500 CONTAINS ONLY ON AIR & RELEVANT MODES

FOR MORE INFORMATION ABOUT KRYPTO500 VISIT US AT WWW.COMINTCONSULTING.COM

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