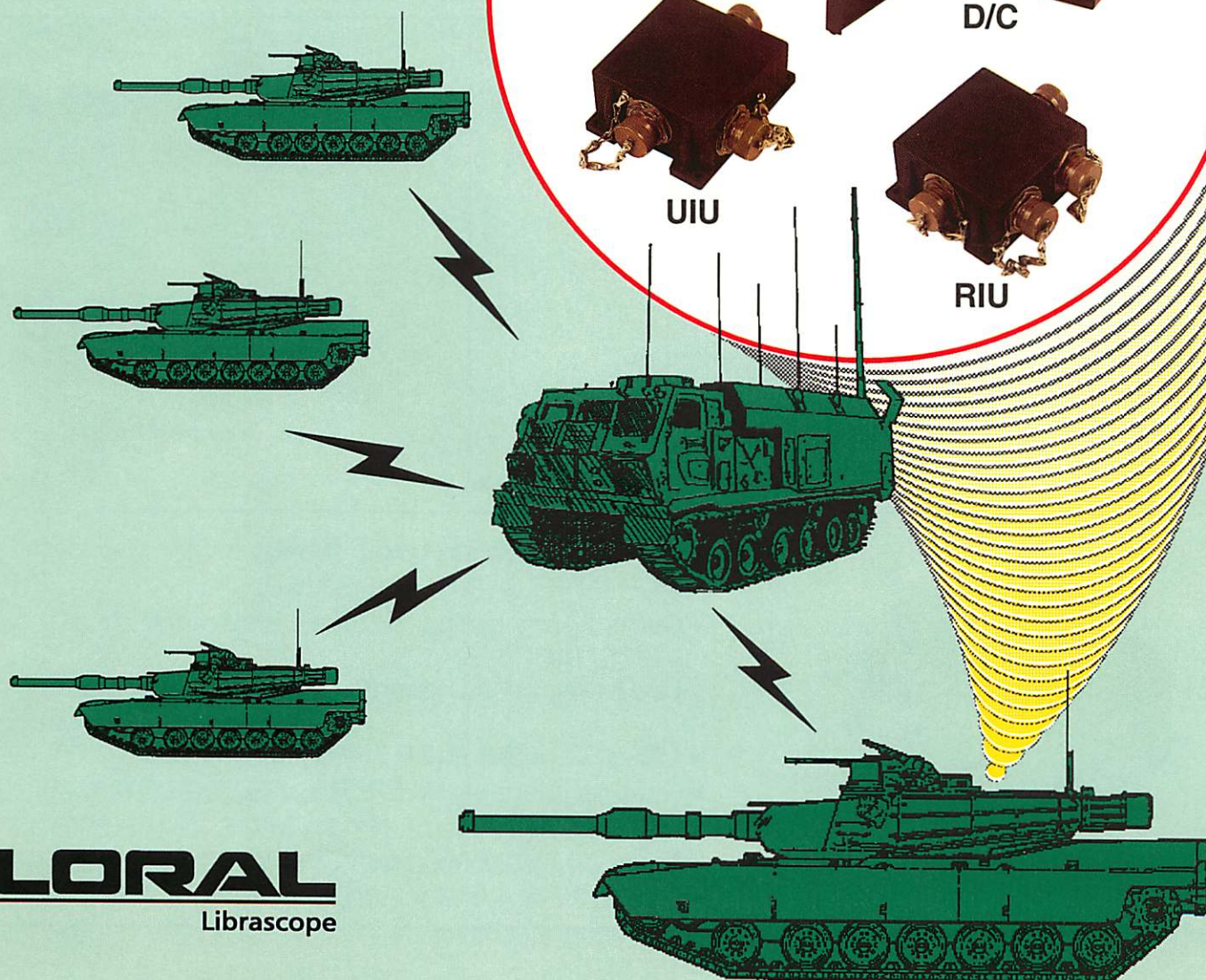
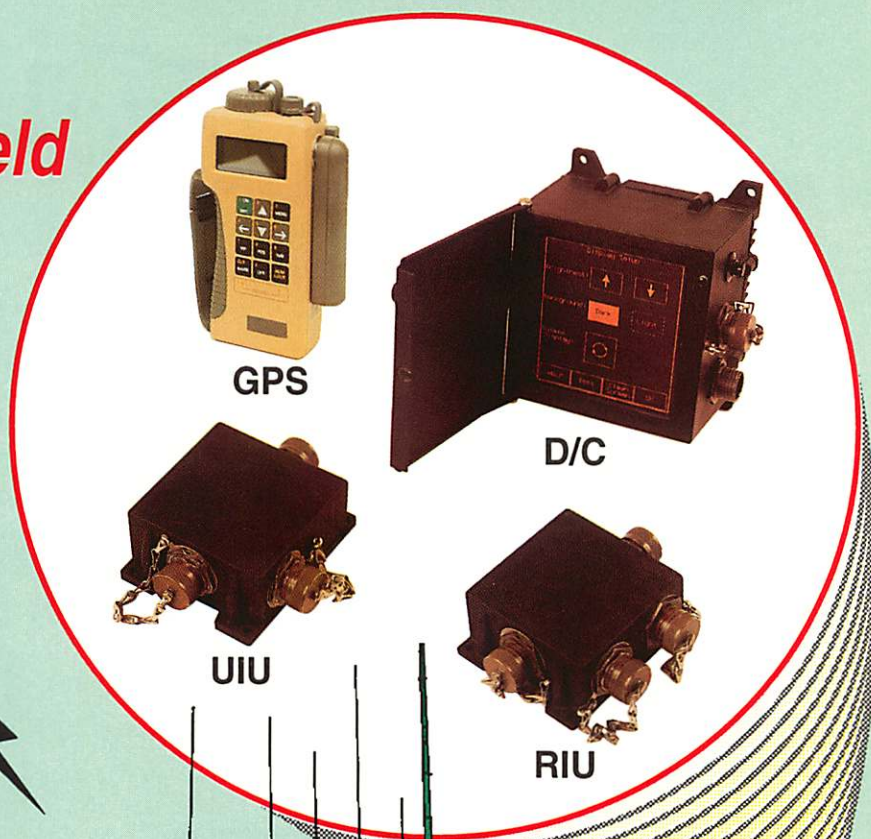


Trac Warn

TACTICAL TRACKING, WARNING AND REPORTING SYSTEM

**Applique Battlefield
Digitization**



LORAL
Librascope

Background - TTracWarn is based upon "Applique" digitization hardware and software currently under development for the U.S. Army. This "Applique" militarized system called MICAD automates and digitizes the NBC detection, location, warning, reporting, and protection process for combat, combat support, and combat service support units. It is designed to be mounted on armored vehicles, tactical vehicles, vans, and shelters or

to stand alone for area coverage and is operated using existing tactical communications. The current projected basis of issue is one per platoon and platoon equivalent with an estimated total production of 18,000 to 20,000 systems. Librascope, under contract to the Chemical Biological Defense Command, has successfully completed Critical Design Review (CDR) and working prototype hardware and software is now available.

TTracWarn

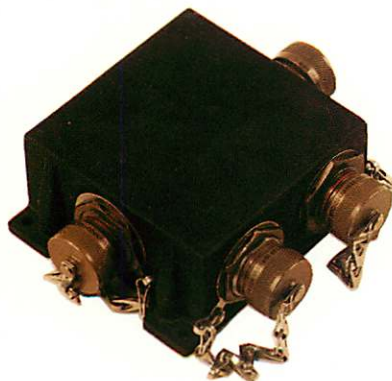
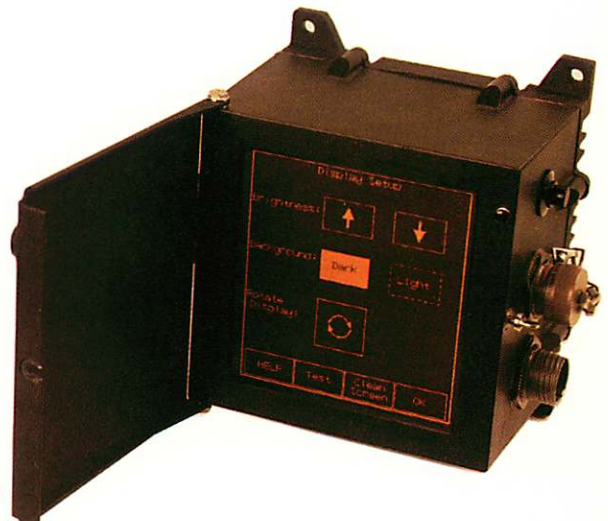
PROVIDES:

- Positive friendly locations for situational awareness and IFF
- Pre-formatted and automated digital messages
- Graphic position maneuver and operational display screens
- Current status
- Alerts

ON-THE MOVE!

DISPLAY/CONTROL (D/C):

- 4.0" X 4.6" Flat-panel EL display
- Touch screen
- Menu-driven
- Free text and pre-formatted messages
- Graphic displays
- ATCCS/AGCCS compatible
- BIT
- Memory: 8MB RAM, 2MB flash memory
- Battery Backup (5-year life)
- 68332 Microprocessor
- Size: 6.0"H x 6.0"W x 4.0"D, and Weight: 8 LBS

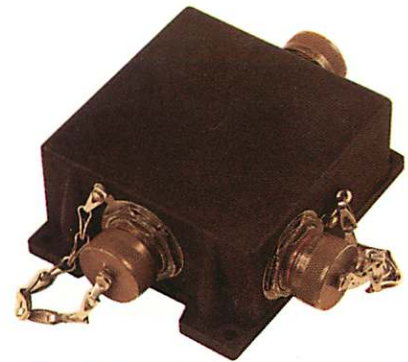


RADIO INTERFACE UNIT (RIU):

- 2 CHANNELS (SINCGARS/MSE)
- Current Army tactical protocols and formats (e.g., MCS/TACFIRE/IVIS)
- Low power consumption: - 0.8 watts nominal
- 2.47 watts maximum
- MIL-STD 1553B and RS-485 bus interfaces
- Optional interfaces to EPLRS, JTIDS, ADDS, X.25, STU-III, AN/VRC-12, KY-57, MIL-STD 188-220()
- Three (3) 68332 Microprocessors
- Size: 2.0"H x 4.0"W x 4.0"D, and Weight: 1.44 LBS

UNIVERSAL INTERFACE UNIT (UIU):

- GPS Link
- RS-232/422 Interfaces
- Memory: 2MB RAM, 1MB flash memory
- Analog sensing and control
- Additional system, computer or digital map display link
- Size: 2.0"H x 4.0"W x 4.0"D, and Weight: 1.1 LBS



SYSTEM CHARACTERISTICS

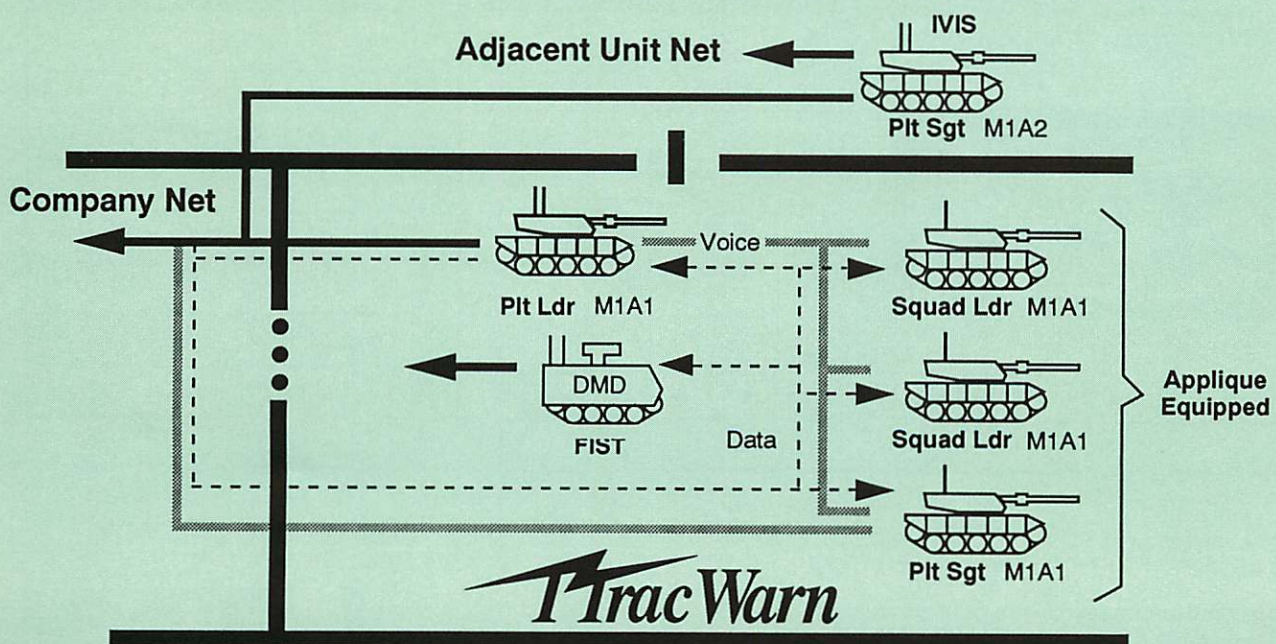
- Full mil-qualified
- EMI and Nuclear-hardened
- Very Low Cost
- 24/28 VDC
- -25F to +120F operation
- Open Architecture
- Low Weight: <15 pounds for basic configuration
- Operates on-the move
- NDI hardware
- Substantial NDI Ada software
- IVIS-compatible
- Initial production: FY95

EASILY EXPANDABLE

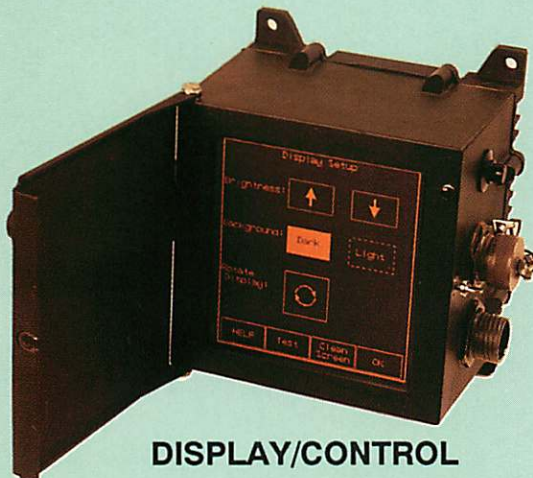
The system can control up to 15 UIUs, which permits easy addition of:

- More powerful computers (e.g., V2 LCU)
- Additional memory (digital map background)
- Larger displays/Remote display and control
- Turret reference
- Autonomous land navigation
- Automatic target location and reporting
- Automatic NBC detection, warning, and reporting
- Automatic voice alarms (over intercom)
- Automatic system activation (e.g., Overpressure Collective Protection)
- Automatic self defense (e.g., IDS)
- Interactive training systems (e.g., MILES)
- Voice recognition

HORIZONTAL TECHNOLOGY INTEGRATION



TTRACWARN OPERATIONAL SCREENS



DISPLAY/CONTROL

CONTROL

SYSTEM	GPS	RADIO
VEH LIST	STOP	VEH STATUS
MSG LIST	MSG FORMS	RESTART
HELP	Test	Edit
CTL	MSG	GRID

EDIT MESSAGES

C26 LOC: 34UNB66709984

FLASH //
FRAGO 6 / 230955ZMAY95 //
ATTACK ON AXIS BLUE 231030Z

HELP CTL **MSG** ZOOM

VEHICLE LISTS

VEH # / ID	LOCATION
C26 / PL	34UNB66709984

HELP CTL **MSG** ZOOM

VEHICLE STATUS

C26 LOC: 34UNB66709984

AMMO

POL

MOPP

CL I

LRF INOP:
LEFT #3 TORSION BAR BROKEN

HELP Send Edit CTL **MSG** GRID

ALERTS

C26 LOC: 34UNB66989762

GAS!

HELP Test Mute CTL **MSG** GRID

TACTICAL

01					
00					
99					
98					
97					
64	65	66	67	68	69
96					

HELP CTL **MSG** ZOOM

KEYPAD

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z	,	.	;	?

HELP Undo Back Space Space 123... OK

For additional information, write or telephone:
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