



It's a Bird, it's a Plane?...
No, it's an Allegory of a Life Cycle Support System

Centralizing Loran Technical and Logistics Support Systems

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ILA Technical Symposium,
Santa Barbara, CA
16-20 OCT 05





IT MAY NEVER
WORK AGAIN!

LT, IT LOOKS LIKE
SOMETHING IS UP.

HOW CAN YOU TELL?
MAYBE I BETTER GET
ANOTHER CUP OF
COFFEE.

YOU DISAPPEAR EVERY
TIME WE HAVE A CRISIS.
IF I DIDN'T KNOW BETTER
I'D SWEAR YOU WERE...

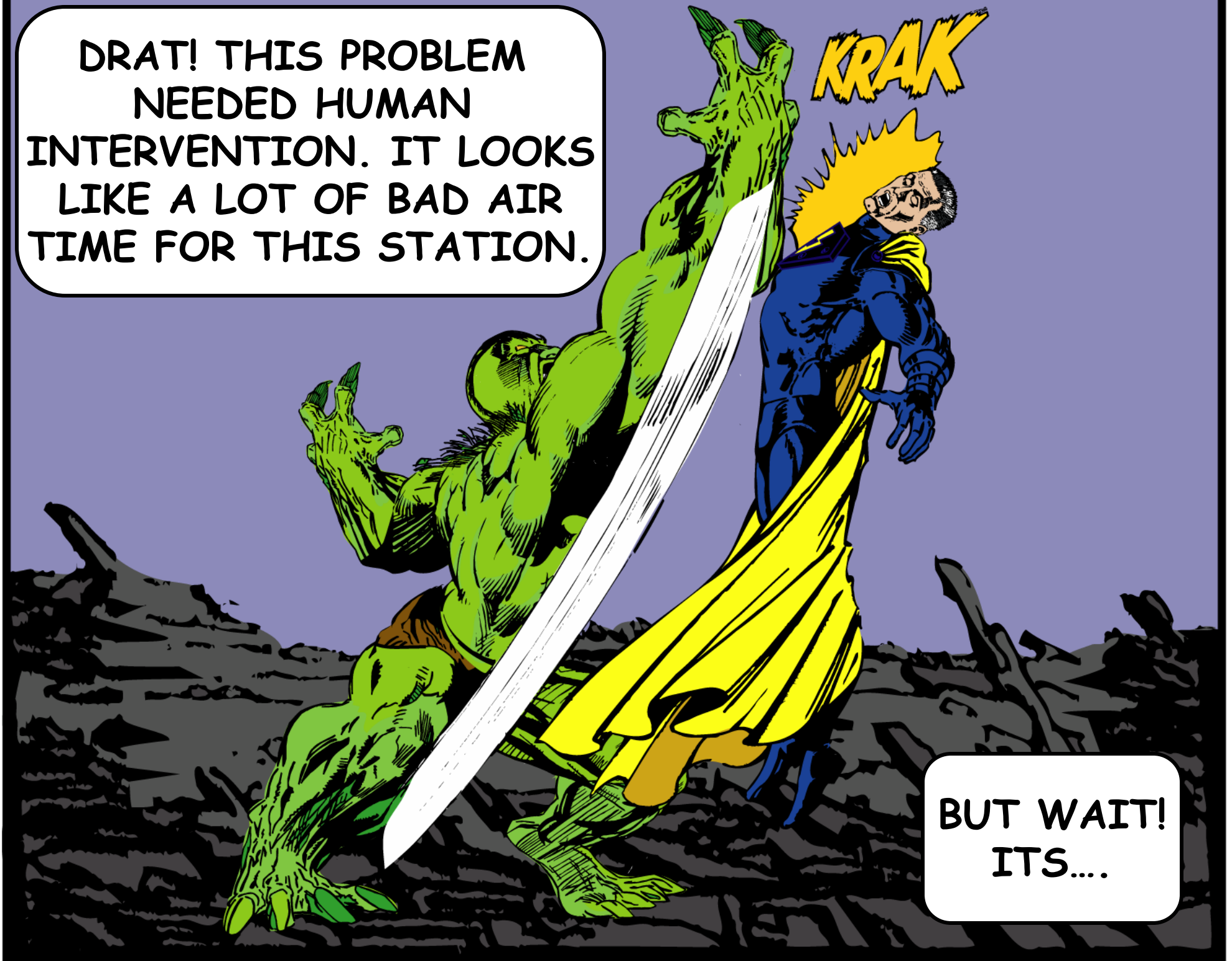
CONVENTIONAL LORAN SUPPORT



THAT IS ONE NASTY LOOKING PROBLEM.



DRAT! THIS PROBLEM
NEEDED HUMAN
INTERVENTION. IT LOOKS
LIKE A LOT OF BAD AIR
TIME FOR THIS STATION.



BUT WAIT!
ITS....

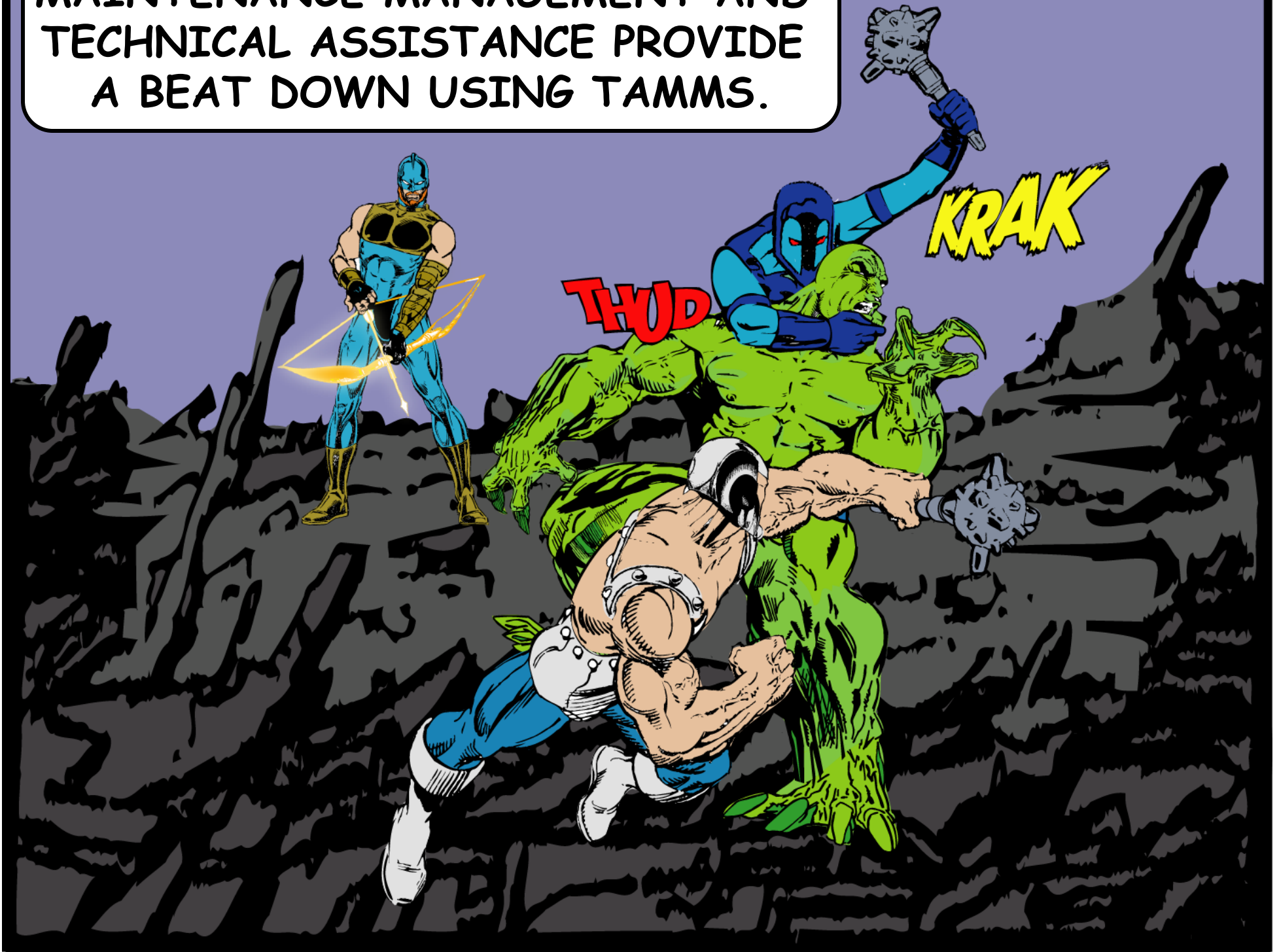
THE LORAN LIFECYCLE SUPPORT SYSTEM



TECHNICAL INFORMATION MANAGEMENT GIVES
THAT PROBLEM A HEAVY DOSE OF TIMS.



MAINTENANCE MANAGEMENT AND
TECHNICAL ASSISTANCE PROVIDE
A BEAT DOWN USING TAMMS.



ELECTRONIC LOGISTIC SUPPLY MANAGEMENT
FIRES OFF ELSS.



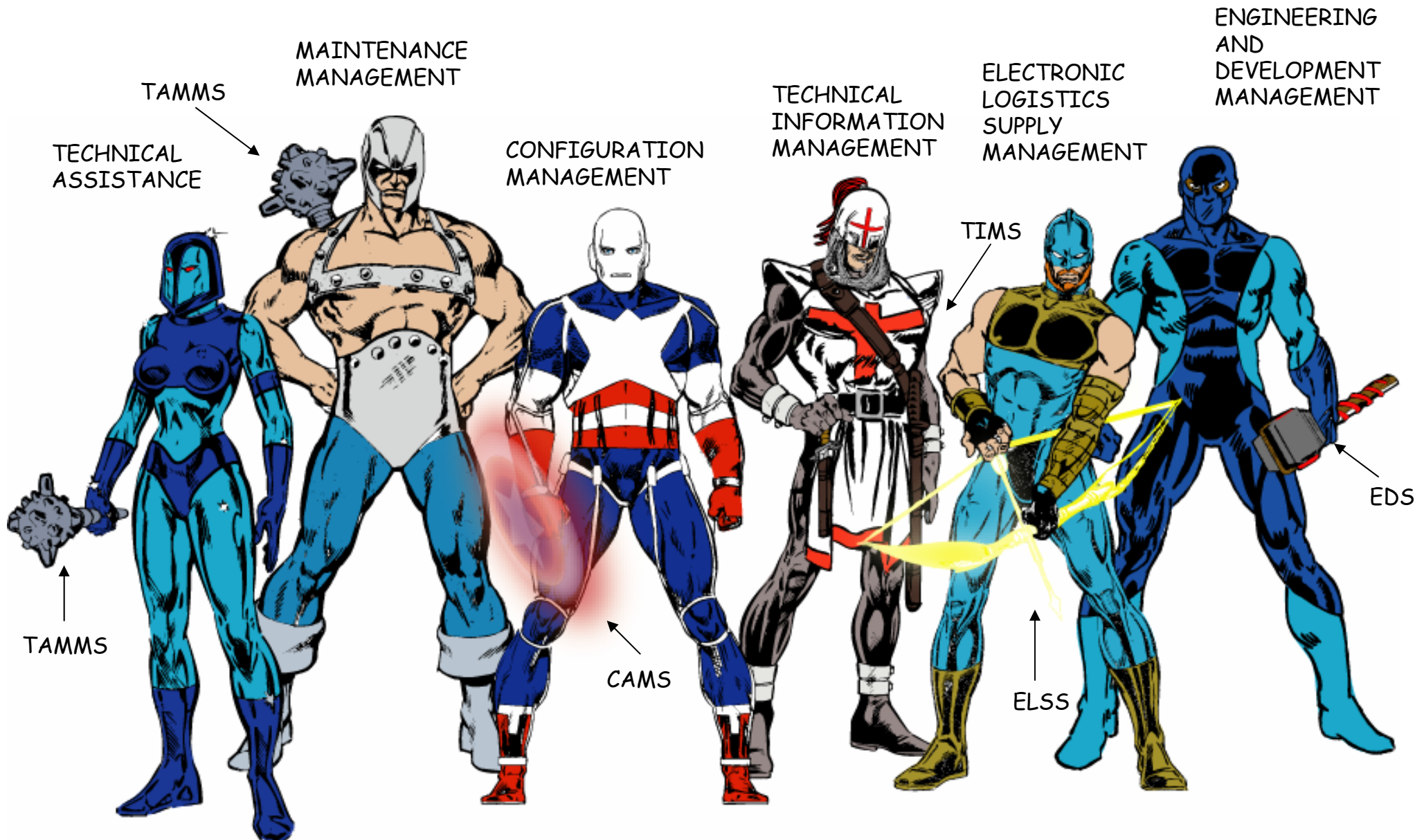
ENGINEERING
DEVELOPMENT
GIVES THE
PROBLEM
A FACE FULL OF
EDS.



CONFIGURATION MANAGEMENT DELIVERS
THE KNOCK OUT BLOW USING CAMS



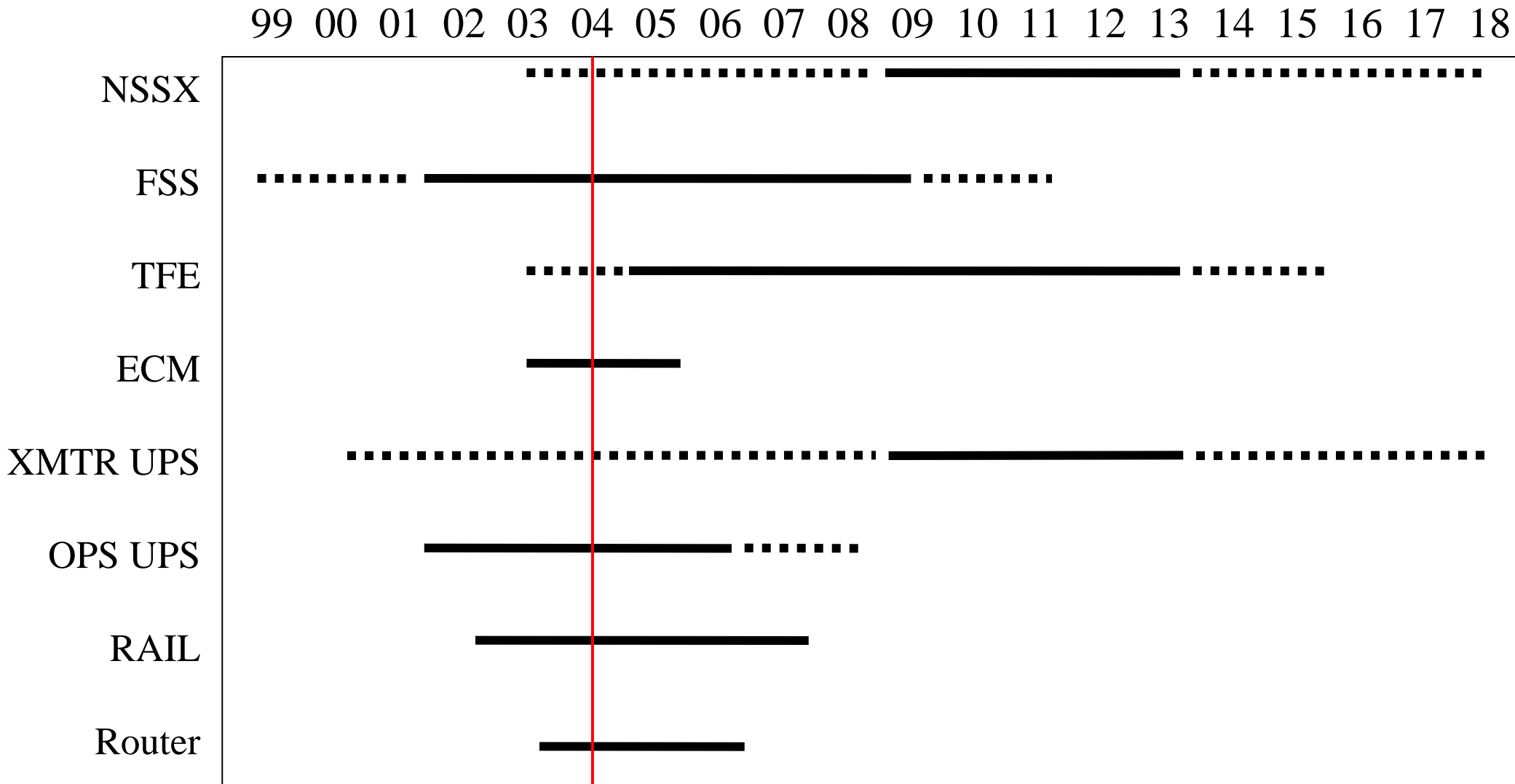
ONCE AGAIN THE DAY IS SAVED THANKS TO THE WARRIORS AND WEAPONS OF THE LORAN LIFECYCLE SUPPORT SYSTEM



WHY ARE WE WHERE WE ARE?...or, CAN WE BLAME IT ON THE KRYPTONITE!?

- LRP siphoned most of LSU's resources for modernization efforts.
- LSU concentrated on engineering, standardizing configurations, & installing systems.
- Systems fielded used warranty support & did not address complete life-cycle of the system
- Training, tech support & technical information systems were not fully developed.

Warranty Situation



WHERE DO WE GO FROM HERE? or...A MEANS OF GETTING AWAY FROM THE KRYPTONITE!!

- **Configuration management system** that provides centralized control & technical support.
- **Technical information program** that provides information to enhance effective troubleshooting & equipment repair & provides stimulated training.
- **Logistics program** that provides adequate spare parts and tracks inventory.
- **Engineering Development Program** that delivers products based on customer requirements; follows sound technical business plan.

IS THIS THE ANSWER?



I WISH IT WERE THAT EASY!!!!

THE ANSWER:
***CENTRALIZED TECHNICAL HELP DESK
AND MAINTENANCE MANAGEMENT
SYSTEM***



Tech Support Help Desk

Triage Philosophy

Layer 1 – Over the wire support; solve 80% of problems above the level of the onsite tech.

Layer 2 – Over the wire support w/IPST; upgraded tech expertise from LSU; solve most remaining 20% of problems.

Layer 3 – Support for malingering problems not solved by the IPST or catastrophic failures. Layer 3 auto implements ERFT.

Maintenance Management System

➤ Preventive Maintenance System

➤ Corrective Maintenance System

PMS Manhour Requirements for Loran Platforms

Platform	# of Platforms	Annual PMS	Total
TTX Dual/Single Rate	6	1700	10200
SSX Dual/Single Rate 32 HCG	6	500	3000
SSX Dual/Single Rate 56 HCG	7	720	5040
NSSX 16 HCG	4	50	200
NSSX 48 HCG	1	120	120
PCMS Site	24	180	4320
Totals	48	3270	22880

PMS Manhour Availability for Each Station Type

Station Type	Annual Hours/Person Based on 40 Hour Week	# Technical Personnel Assigned/ Unit	Available Manhours/ Unit	# of Station Types	Annual Available Hours/ Station Type
Isolated TTX	2080	6	12480	3	37440
Other TTX	2080	4	8320	3	24960
SSX	2080	3	6240	13	81120
NSSX	2080	4	8320	5	41600
Totals	2080	17	35360	24	185120

CONCLUSION

**CAMS/
TIMS**

Configuration Mgt
Technical Information Mgt

TAMMS

Maintenance Management Systems
Technical Assistance

ELSS

Logistics and Depot Support

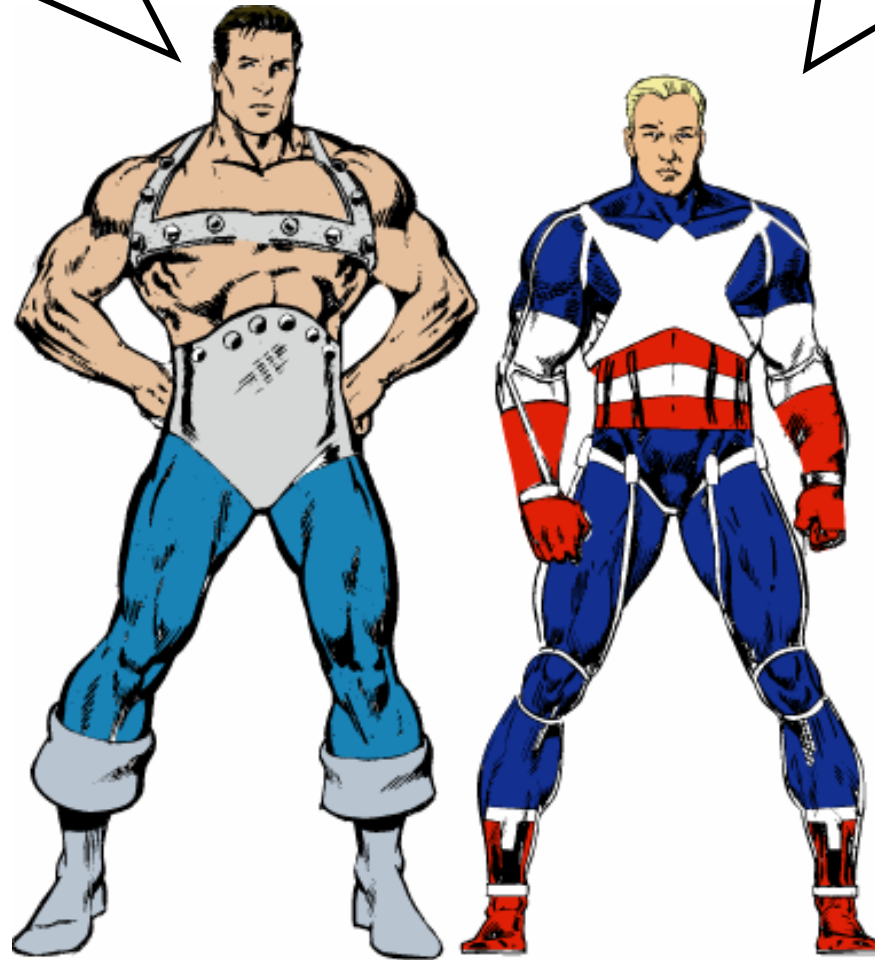
EDS

Engineering Support

This has been a

James Betz

John Elliott



Production