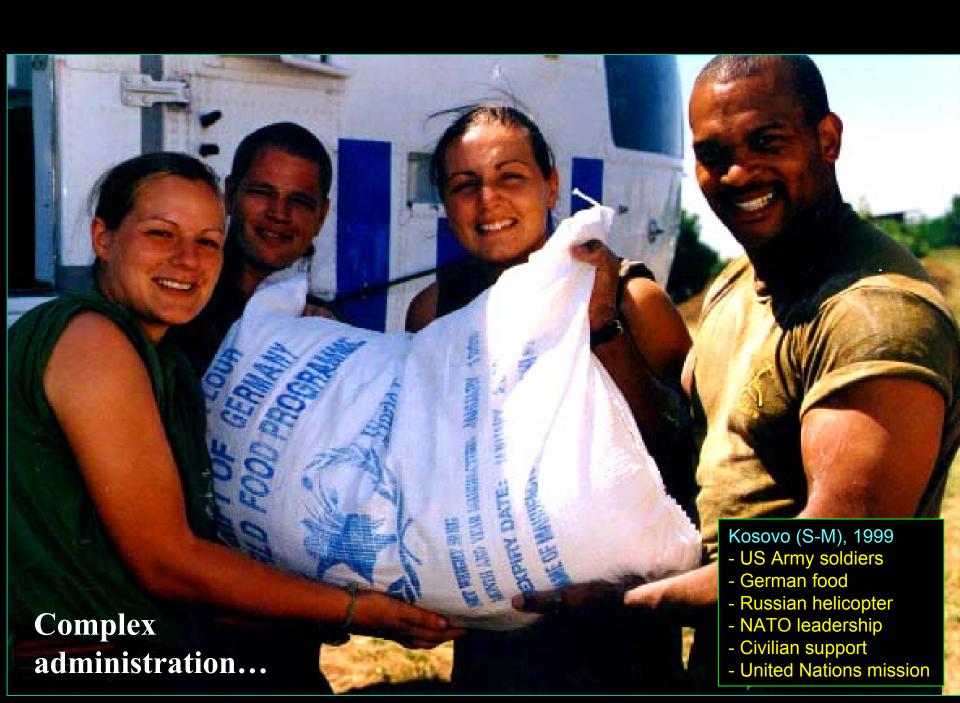




Background:

- Civil-Military Operations as a requirements model
- Strong Angel in RIMPAC 2000
- The 10-20-30 Document
- The war in Iraq (OIF)
 - Tracking humanitarian assessment information
 - Lessons Learned in leadership-through-collaborative-support
- Demonstration of 2004 example opportunities
 - Strong Angel II: Designing the Edge
 - July 17-22, Kona, Hawaii, RIMPAC 2004





...meeting cultural impediments...



MARTIN VAN CREVELD

THE Transformation OF WAR

THE MOST RADICAL REINTERPRETATION OF ARMED CONFLICT SINCE CLAUSEWITZ Environment,

Scarcity, and

Violence

THOMAS F. HOMER-DIXON

The 1999 US National Military Strategy document...

"It is imperative that our Joint Forces also enhance their ability to operate in consonance with other US government agencies, and with Non-governmental Organizations (NGOs), International Organizations (IOs), and Private Voluntary Organizations (PVOs) in a variety of settings. The specialized access and knowledge these organizations possess can facilitate prompt, efficient action to prevent conflict, resolve a crisis, mitigate suffering, and restore civil government..."





Joint Publication 3-57





Joint Doctrine for Civil-Military Operations





8 February 2001





Joint Publication 3-07.6





Joint Tactics, Techniques, and Procedures for Foreign Humanitarian Assistance

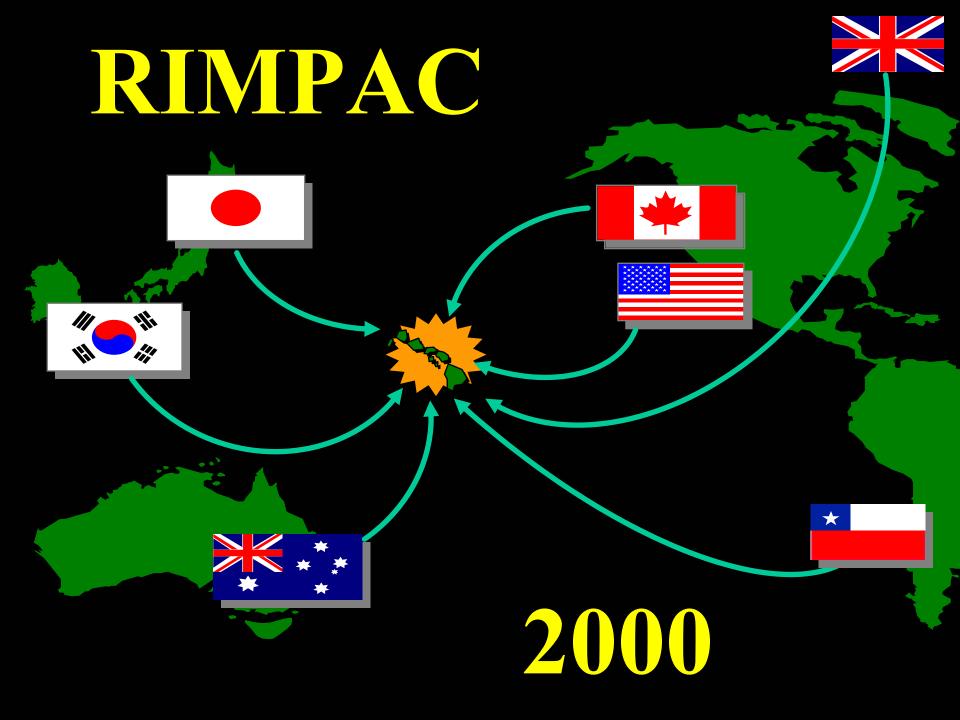




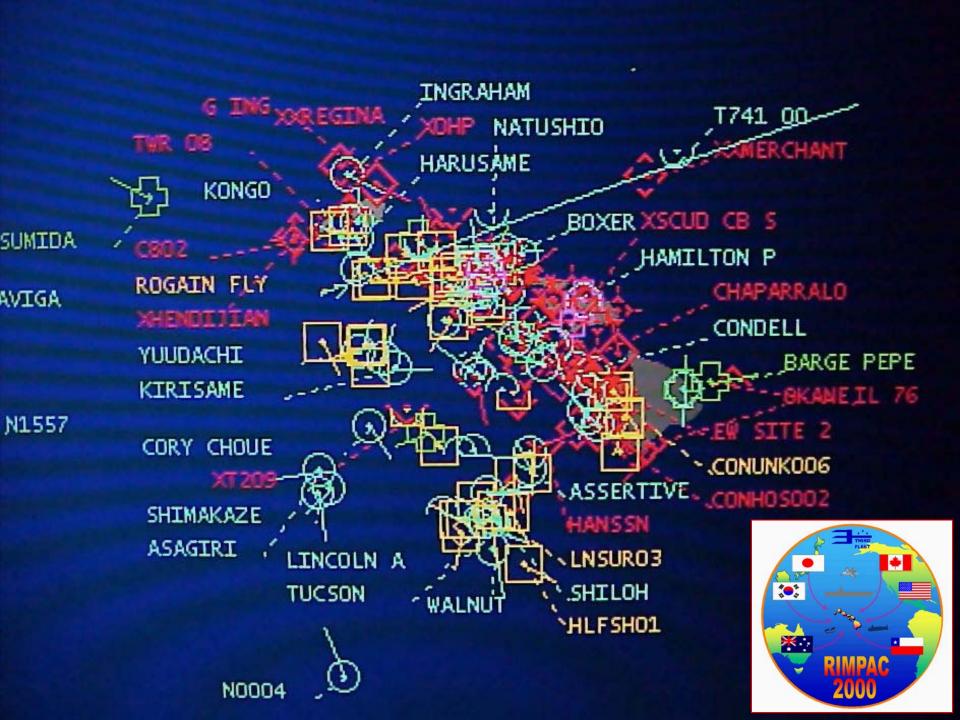
15 August 2001













The 10-20-30 Document

Civil-Military Interaction Advice from Strong Angel

27 June 2000 Rim of the Pacific 2000 Eric Rasmussen, Fleet Surgeon

The summary thoughts below have been very liberally borrowed from smart people. Some are previously published, some are original statements from Strong Angel participants, and some are just our discussed and considered opinion of a productive way to do things. Few are innovative. In our research we found that lessons learned the hard way - if not integrated - tend to repeat themselves with no prompting. We've tried to capture a few here.

There are three general categories of civil-military interaction:

- conflict intervention,
- natural disaster response, and
- complex emergency support.

There are suggestions for each below.

10-20-30 Document

Ten Commandments:

- The military should generally not be in overall charge. JTF Commander should be clearly subordinate to civilian authorities whenever possible. This:
 - Sets a democratic process in place that's reassuring to the population served
 - ii) Sets expectations for the levels of responsibility
 - iii) Keeps the military footprint to an absolute minimum
 - (1) With a transition requirement apparent daily
 - iv) Allows some mission drift (a desirable flexibility) while minimizing mission creep
 - v) Maintains a coordinated Host Nation Support mandate
 - (1) Establish the scope of that mandate early and often
- 2) Technology cannot substitute for personal interaction

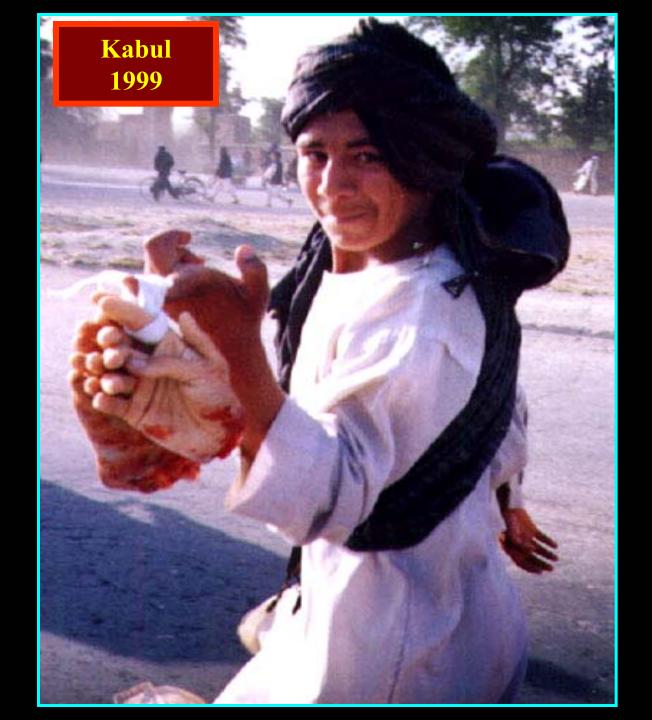




Personal relationships through civil-military exposure...

Into the war...





Sharia

Madrassas



Afghanistan, 1999

"Taliban recruit 300,000 in Jihad against the new Crusaders..." 23 September 2001



Collaboration...?





Leadership challenges...











Saddam Hussein fell and clerics filled the void

The DAILY STAR (Lebanon), 07 Jun 04

Freed from state control, Iraqi religious authorities - drawing on their moral authority and extensive mass communication networks, and benefiting from the weakness of secular forces - quickly filled the political void created by the fall of Saddam Hussein's regime.

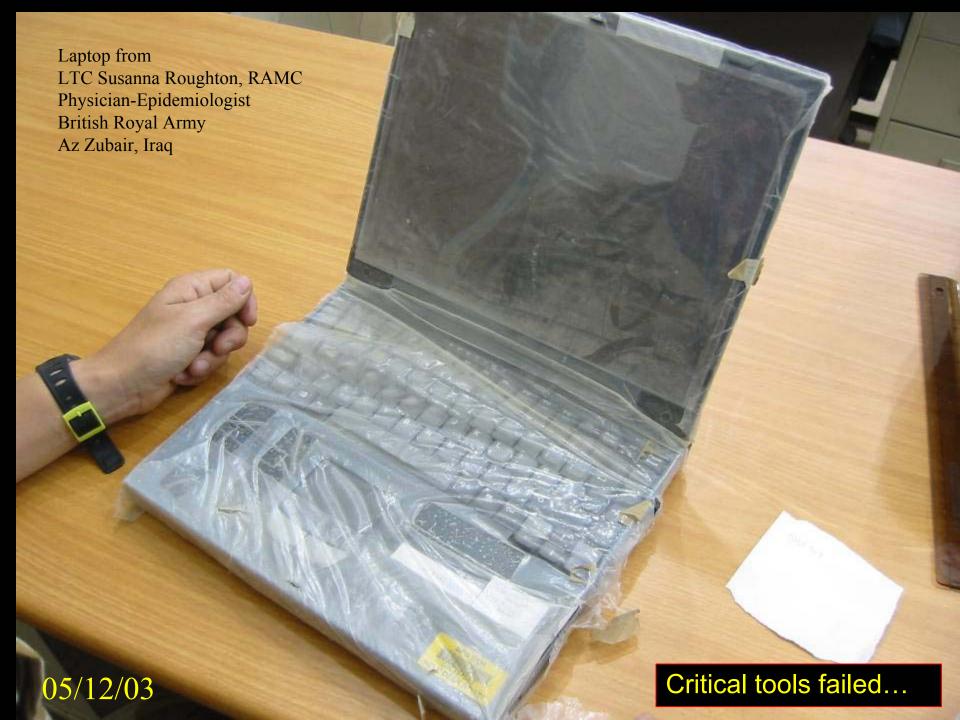
A year later, these authorities remain the principal shapers of public opinion among most Iraqi Arabs.





The environment vs. effective work











Deliberate efforts at infrastructure disruption







Basra General Hospital





Cholera outbreak Basra, Iraq May 2003









Clean water restoration







MERPI

Medical
Evacuation and
Repatriation
Program for
Iraq







Communication during Post-Conflict Reconstruction

Broad information accrual and dissemination
Unconventional partners
Unusual requirements

We need more resilient tools.



Comms

- UHF
 VHF
 HF
- 4. SATPHONE
- X. PA system

No. 8, 22 APRIL 2003

HEALTH INFRASTRUCTURE:

BAGHDAD:

- Al Rashid hospital was reported to have been burned and looted. Some 700 patients who left have not returned. "These people, with injuries, infections and other trauma, are extremely vulnerable, and in need of medical assistance," WHO warned. "This situation tragically underscores the need and obligation for the occupying forces to ensure civil order and security, including the security for hospitals and other medical facilities." (ARABIC NEWS, 21 APR)
- Al-Yarmouk Hospital: The over 700-bed Yarmouk hospital has been partially looted, and only about 10 per cent of the staff are still working there. (ARABIC NEWS, 21 APR)
- Ibn Al Hithem opthamology Teaching Hospital, with 400 beds, is in "good shape," having been spared the looting. (ARABIC NEWS, 21 APR)
- Ibn Al Nafis Vascular and Cardiac hospital, with 170 beds, is one of the few that is still functional. Surgeons from other hospitals which were damaged or looted are lending a hand at Ibn Al Nafis. Although the facility seems to be secure, hygiene there is reported to be very poor. (ARABIC NEWS, 21 APR)

NORTHERN IRAQ:

- . WHO also found that 50 70 per cent of health services are functional in Mosul, where looting has not been as severe as in other centres. "There are many people in need of health care, however, including many casualties from the conflict," the agency warned, urging funding for health services throughout Iraq. (ARABIC NEWS, 21 APR)
- . The KDP [Kurdistan Democratic Party] and the coalition forces assumed the responsibility of protecting hospitals' equipment of Kirkuk and did not allow hospitals to be looted. From the first day of liberation, all the hospitals of Kirkuk have been providing health services to the people of the city. The main problem of lack of medicines, doctors and ambulances has now been settled. Kirkuk General Hospital discharges 300 patients per day; and since the day of liberation, 200 major surgery operations and 500 minor surgery operations have been carried out. (BRAYATI, 10 APR)

POWER INFRASTRUCTURE

BAGHDAD:

 Electricity has been restored to parts of Baghdad after being cut for more than two weeks, and engineers were working furiously Monday to restore power to the rest of the city amid growing anger over the lack of basic services in the capital, military officials said. (ARAB TIMES, 21 APR)

Information is often in other languages...



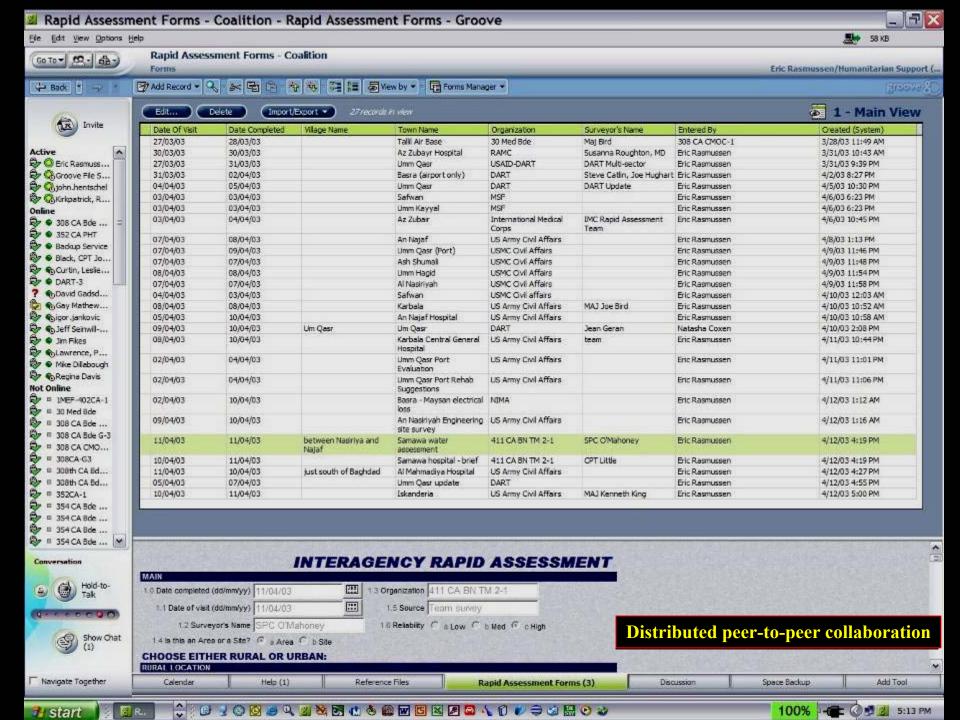


RAPID ASSESSMENT FORM (Section 1) Date of visit: Date of vis	Use this form for individual villages or urban sections/subdivisions (Depending on selection from Section 1)
1.7 (d5/mm/yy)	Date of visit:
f.d Is this an Area or a Site? Area of Site f.S Source:	2.2 Town / Village Name:
CHOOSE EITHER RURAL OR URBAN:	2.3a Section Name (for URBAN areas):
RURAL 2.1 Settlement Type: Permanent Seasonal / Nomadio Camp The place is new since 01/01/2003	2.4 District:
LOCATION 2.2 Village Name: 2.3 P4Code: 2.4 District 2.5 Governorate:	POPULATION Estimated Population at this location at this location why. Current 4.1 2
2/ Lafetude: 2/ Determined Using: GPS	01/01/03: 4.2
2.0 Longiflude: b Map If so, map name and source:	If number of displaced persons is unknown, enter the rough percentage of the total population.
2.0 Other Coordinates:	Optional population data: Estimated number of Female Headed Households:
"SPE data is appeted the datase and by The UK Congreption Internation Northly-Group recommends and adoptionly and troughout in decreal degree, ACCEST datase Any officers and by the action regarded in the form to abbe consumer	Estimated number of children under age 5.
LOCAL LEADERSHIP Position, Name, Address:	Estimated number of children without caregivers:4.5
	SANITATION SHELTER 6.1 Estimated Total Number of Dwelling Units* (DU):
URBAN LOCATION	as a stand driver residence or apartment in multi-unit structures ### Exidence of human waste? ### YES NO ### Estimate Damage Using Infrastructure
2.2 Town Name 2.3 P-Code	Damage Assessment Guide (from Section 1) Al Buildings
2.4 District 2.5 Governorate	DUs (in %) of Damaged DUs (0.3 Type (0.4 %)
2.6 Latitude: 2.7 Determined Using: GPS	up in the street?
2.II Longitikude:	SAFE WATER Class 2 10 0R 32 3
2.9 Cities / towns are normally subdivided into distinct sections. If Subdivided, what are these sections called:	SAFE WATER Class 3 Class 3 Class 3 (at your) Car 2 (at your)
List the section names below: Please provide coordinates to the physical center of the section:	protected or a treated source or a closed well with a Class 4 frank pump, or a piped system with stand posits from a (final royed) d1 d2 e
of of Lattude: of Longitude:	profected spring. Current Percentage 01/01/03 percentage Perceived Quantity Perceived Quantity
b1 b2 Leftude: s2 Longitude:	of Household Using of Household Using Adequate / Inadequate Good / Bad
ET EJ Latitude: EJ Longitude:	Private Wells: 7,1 a b a d
d1 oil Latitude: oil Longitude:	Public Wells: 7.2 a b a d Hours per day Piped Systems: 7.3 a b a d
ef of Latitude: of Longitude:	Supplied by Water Tanker / Truck: It # # # # #
ff	Open / Broken Pipe: 7.5 a b a a
CITY A DAILNIGT DATION / LOCAL LEADERS (ID	Unprofected Springs / Rivers: 7.6 a b a
Contact details for key departments (names I addresses):	Other 2,7 s b c s
City Administrator: 2.11	HEALTH Available Resources
Water / Sevent 2.42 Public Works 2.43	Available Hesources
Health: 2.14	Name of Facility #1 19 19 19 19 19 19 19 19 19 19 19 19 19
Education	at at at at at at at at
Police:	at at 42 00 44 15 µ5 14 15
	43 A5
INFRASTRUCTURE DAMAGE ASSESSMENT GUIDE - RURAL / URBAN	04 04 04 04 07 04 15 g4 14 14 14
1 None / Minor 2 Moderate 3 Severe 4 Destroyed	Total Number of other bained health workers (i.e. CHW/ TBA)E? No services, give location people go for health care:
	NUTRITION HPB/Th. Milk Number Trained Staff! Number of Weighin
	Number Closed Available YES or NO Volunteers Available Scales Available
	Inter-Agency Rapid Assessment Form
GENERAL COMMENTS	Primary F

oogle -		_	Search Web	@Search	Site T	News Pag	geRank 🕖 P	age Info 🔻 🖺
		1 19	INTERAC	SENC	V DAI	DID A	eere	SMENT
MAIN			MILKA	LIVO	MAI	ID A	JULU.	JIVILIVI
Save	to a file							
1.0 Date c	ompleted (dd/mm/)	(y)		1.3 Organizatio	on			
1.1 Dat	te of visit (dd/mm/)	(y)		1.5 Source	ce			
	1.2 Surveyor's Na	me		1.6 Reliabil	ty O a Lo	w O b Med	O c High	
1.4 is th	is an Area or a Sit	e? O a Arr	ea O b Site				1,000	
	E EITHER R	URAL OF	R URBAN:					
RURAL LO		0 - 2	nent O b Seasonal	(Namedia O	- 0 0	4 November	04/04/2002	
	2.2 Village Name	O a Perman	ient O b Seasonal		3 P-Code	a New Since	01/01/2003	1
	2.4 District				5 Latitude			1
	2.5 Governorate				Longitude			1
	Determined using	O - 000	O 5 May /	Г	Longilloo		5 44 1	
	ther coordinates	O a GPS	O b Map (map nam	an a	2.10 Type		2.11)	1
	AL LEADERSHIP	7			io typo			-61
Position,	Name, Address:							¥
URBAN LO								
2.2 Town Name			2.3 P-Code					
2.4 District			2,6 Latitude					
	2.5 Governorate				2.8 Lon	gitude		
			O b Map (map nam				2.17)
2.9 Cities	/ towns are norm	ally subdivide	ed into distinct section	ns. If Subdivide	ed, what are sections of	5-11-2-11-2-11-2-2-2-2-2-2-2-2-2-2-2-2-2		
	List the section no	ames below	Please	provide coordi	nates to the	physical cente	er of the sect	tion
a1			b1 Latit	ude		c1 Longitude		
a2			b2 Latit	ude		o2 Longitude		
			b3 Latit	ude		c3 Longitude		
a3			54 Latit	ude		c4 Longitude		
a3 a4			b5 Latit	ude		c5 Longitude		
						o6 Longitude		17
04			b6 Latit	ude				
a4 a5 a6	IINISTRATION / L	OCAL LEAD	b6 Labb ERSHIP 2.10 is city		still function		O No	
a4 a5 a6 CITY ADM Contact de	etails for key depa		ERSHIP 2.10 ls city		still function		O No	
a4 a5 a6 CITY ADN Contact de 2.11 City			ERSHIP 2.10 ls city		still function		O No	

Implemented despite...

- No military in the design
- No staff
- No training logistics
- No authority
- No funding
- No communications
- No civ-mil network
- And yet no other option.



This was created in response to assessed needs, crafted to precisely defined requirements that altered frequently during the war.

"Distributed collaboration inside CENTCOM won the war"

Statement from CENTCOM and the Army Lessons Learned Lab Quoted by an OSD official, 11 July 03

- Secure file encryption at 192-bit threshold
- Voice-Over-Internet (encrypted)
- Bandwidth optimized
- Alerting cues
- Import Export as XiviL with any database
- Web download for free if needed
- Adaptive architecture (instantly flexible)
- Transparent all organizations
- Distance learning (and teaching)
- Remote presentations

- Reference library of pubs and docs
- Logistics delivery calendar
- Peer-to-peer, so no ownership
- Instant Messaging (encrypted)
- Secure chat (encrypted)
- Annotated maps
- Annotated satellite photos
- Who's available, instantly
- Immediate feedback on comms
- Sends only binary changes



Based on our growing body of experience, we need:

- Reliable, robust, flexible, simple, inexpensive, shareable, peer-to-peer, securable, collaborative, wireless voice and data over the internet at decent bandwidth in any location in the world on short notice for <u>all</u> players immediately...
- And experts available 24x7 for discussion...
- And a resilient power source to run it all....

Or our leadership responsibilities will not be met.

Whining constructively...

Saddam Hussein fell and clerics filled the void

The DAILY STAR (Lebanon), 07 Jun 04 Freed from state control, Iraqi religious authorities drawing on their moral authority and *extensive mass* communication networks, and benefiting from the weakness of secular forces - quickly filled the political void created by the fall of Saddam Hussein's regime. A year later, these authorities remain the principal shapers of public opinion among most Iraqi Arabs.

Kona, Hawaii 17-22 July 2004

"Design and implement a far-forward capacity for rapid and appropriate humanitarian information management from global resources within and across civil-military boundaries."

Tasking: The Office of the Secretary of Defense

Principle Investigator: CDR Eric Rasmussen, MC, USN

Exercise Integration: RIMPAC 2004, Third Fleet, US Navy

- Electron flow
- Exemplary worksites
- Translation resources
- Educational assets inherent
- Communication with those served
- Tools <u>sharable with non-mil partners</u>
- GIS understanding of the environment
- Collaborative Civil-Military logistics support
- Collaborative reachback to retained experts

Tools:

Relief plan tracking

- Logistics delivery schedule
- Professional Contact rolodex
- Maps, images, and GIS overlays
- Briefing documents and presentations
- Rumor reporting and incident tracking
- Emergency Alerting System (J-2 at CPA)
- Field requests for humanitarian assistance
- Library of policies, publications, and agreements



www.strongangel.telascience.or

9

home news members calendar you are here: home

navigation

Home
Images
BLOG
Presentations
10-20-30
Technologies
Organizations
Instory
Tasks
Web Tooks
Contact us
Software
Lessons learned
External links

Name rasmussene Password ******** log in Forgot your password? New user?

Strong Angel Linux

2004-06-11

news

distro

Strong Angel II: 17-22 July, Kona, Hawaii



CRITICAL INFORMATION MANAGEMENT WITHIN AUSTERE ENVIRONMENTS

Overview: Strong Angel II is the name of a capabilities demonstration to be held in July 2004 near Kona, Hawaii. The event is designed to encourage the development and evaluation of tools designed for humanitarian information collection and use within an austere environment. We're particularly interested in proposed solutions that cross the civil-military boundary gracefully and reliably during a post-conflict reconstruction.

Within the five days of the demonstration we will pursue problem identification, proposed solution development, a site demonstration, user interaction and opinion, and a rapid evaluation of our successes and failures. We'll then document, to the limits of our resources, what we found and make it all available here.

Background: Months in Iraq supporting humanitarian operations across the civil-military boundary revealed shortcomings in capabilities for which there seemed to be both an obvious and persistent need <u>and</u> some readily available answers. Despite significant efforts on the part of many involved, a large percentage of those shortcomings persisted well after the war, and some remain to this day.

This demonstration will address a few of those issues present in Iraq during April of 2003 by establishing a humanitarian informatics site in a remote and austere environment within the Rim of the Pacific 2004 Operations Area during July of 2004. Within that collaborative civil-military site we will demonstrate capabilities within the following topic areas:

Problems to address:

- 1. Demonstration of Machine-Translation tools in Arabic
- 2. Demonstration of collaborative tools appropriate for civil-military support
- 3. Demonstration of remote communications capabilities appropriate for both civilian and military use within an austere environment
- 4. Demonstrate a proposed Information Zone capability
- 5. Demonstrate Logistics support through collaborative tools defined for Iraq
- 6. Demonstrate iterative Humanitarian Assessment collection and analysis on world standard indicators
- 7. Demonstrate simultaneous and collaborative GIS functionality across three (or "n") nations.
- 8. Demonstrate open-source application effectiveness for micro-entrepreneurship.

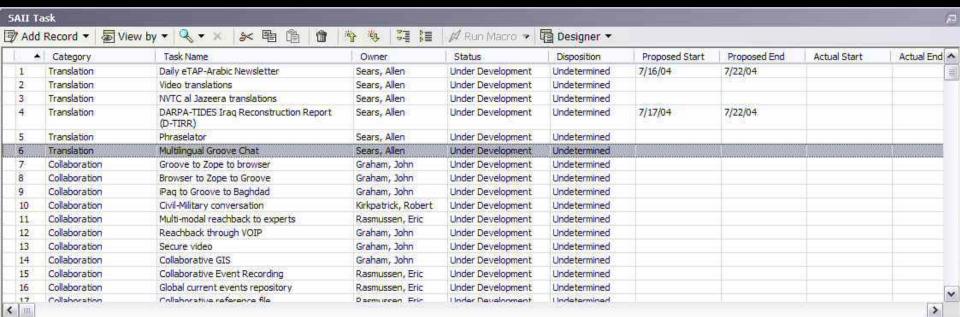
83 tasks, small team (including the New York Times)

Translation:

- Three topics will be chosen by 10am daily from Arabic and Chinese current events and evaluated using TIDES-developed technologies (eTAP-XL and MiTAP) by TIDES World Press Reports (TWPR), then presented as a newsletter each evening by 6 PM. (Scored by DARPA for cost / benefit analysis, and the critical value of the reports)
- Daily evaluation of two relevant video clips in translation from the eTAP-XL Video Monitoring System. The translated clips will be reviewed for utility by
 a CPA translator, a native speaker, and the NVTC, to be completed by 5pm. (Scored for response time, and ability to meet specific the translation
 needs of site users)
- 3. Submission of two daily items in Arabic from the al Jazeera live-feed on-site to a native speaker/cultural advisor (NS-CA) and to the National Virtual Translation Center (NVTC) for content and meaning. (NVTC scored on comparison to NS/CA as a gold standard and for turnaround time)
- 4. Publication from the SA site of an electronic DARPA Tides Iraq Reconstruction Report daily, and a DARPA-TIDES Global Threat Update at least once, during the period 17-22 July.
- 5. Demonstrate daily use of a multi-lingual, pre-recorded, speech-cued, phrase-based and hand-held interview system. The system will be used by non-specialists for humanitarian assessment interviews in Portuguese, Russian, Arabic, Pashto, Dari, and Tagalog (Scored for ease of use, ability to start and complete tasks, and the task completion time)
- 6. Use of Arabic / English two-way, real-time, secure, multi-lingual chat capability, with both text and video, used on a daily basis. (Scored for an ability to discover and communicate critical specific information, clarification of dialog, and ease-of-use)

Collaboration:

- 7. Collect two HA forms into a Zope database daily 17-22 July using paper to HTML to Groove with smart pulling of the appropriate Zope/Plone site, all through the SA site. Confirm automatic distributed receipt in the mainland US, the UK, Italy, and Baghdad, both civil society and military.
- 8. Collect two different HA forms into a Zope/Plone database using paper to browser form, to Zope/Plone, with smart pulling of the appropriate Groove workspace, all through the SA site. Confirm automatic distributed receipt in the mainland US, the UK, Italy, and Baghdad, both civil society and military.
- 9. Push and pull both photos and videos using an HP iPaq PocketPC and Groove File Sharing. Confirm automatic distributed receipt in the mainland US, the UK, Italy, and Baghdad, both civil society and military.
- 10. Confirm conversation with two US military, two international military, two civil-society, and two unrelated civilians each day from the SA site.
- 11. From the SA site pose questions, and receive answers, from three remote specialists each day 17-22 July. Questions should be multi-modal with text, audio, and images incorporated as appropriate.



Strong Angel II Task

Plan Requirements Results Analysis Links & Attachments Record History Summary

Task Number

Status

Under Development

Category Translation

Owner Sears, Allen

Task Name

Multilingual Groove Chat

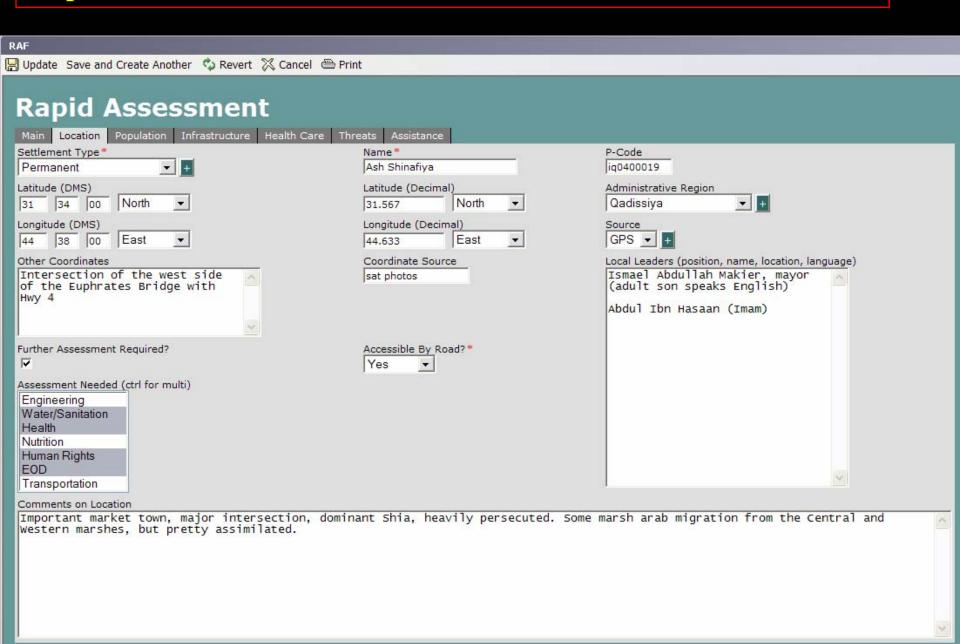
Description

Use of Arabic / English two-way, real-time, secure, multi-lingual chat capability, with both text and video, used on a daily basis. (Performance will be scored for an ability to discover and communicate critical specific information, clarification of dialog, and ease-of-use)

Background

In 2002, the MITRE Corporation released TrIM (Translingual Instant Messaging), a tool that translates conversations by producing two windows- one with the conversation in the original language, and the other in the language of choice of the user. For Strong Angel II, MITRE has ported TRIM to the Groove platform, naming the prototype Groove Coaltion Chat, under the working assumption that a later version of the tool could be operationalized in support of Coalition Forces in Iraq and Afghanistan. This provides an instant, multilingual chat tool capable of real-time communication that transcends language barriers.

Rapid humanitarian assessments...now in Sudan with UNJLC



Reconstruction indicators:

Short-to-Medium Term Indicators for Post-Conflict Reconstruction

Lynn L Amowitz MD, MSPH, MSc Director, Research International Medical Corps

Director, Initiative in Global Women's Health
Division of Women's Health, Brigham and Women's Hospital
Instructor in Medicine, Harvard Medical School
lamowitz@rics.bwh.harvard.edu

Population and Demographics¹

(92 Indicators in 18 categories

- OSD (Office of the Secretary of Defence)
- DARPA (Defence Advanced Research Projects Agency)
- DHS (Department of Homeland Security)
- ARC (American Red Cross)
- BBN (Bolt, Baranec, and Newman)
- Buckminster Fuller Institute
- CENTCOM (US Central Command)
- Coalition Provisional Authority (Baghdad)
- Engineers without Borders
- George Mason University
- Groove Networks
- International Medical Corps
- Italian Army (Humanitarian Support Unit)
- Mindtel (Syracuse University)
- MITRE Corporation (Mass Inst Tech Res & Eng)
- National Interagency Civil-Military Institute
- National Virtual Translation Center
- NATO
- New York Times
- Rocky Mountain Institute (Aspen)
- San Diego State University

- SPAWAR Systems Center
- Third Fleet (US Navy)
- TIDES World Press Reports (DARPA)
- UK Foreign and Commonwealth Office
- UK Royal Navy
- United Nations Joint Logistics Center
- USAID (US Agency for International Development)
- US Army Civil Affairs (352nd)
- US State Department
- WFP (World Food Programme)

National Representatives

- Australia
- Denmark
- Djibouti
- Ethiopia
- Greece
- Japan
- Kenya
- Malaysia
- Romania
- Serbia and Montenegro

The Edge is a secure, adaptive mesh architecture designed to achieve rapid multi-sector information flow and effective coordination

- across cultural, linguistic, civil-military and geographic boundaries
- among humanitarian actors, intervention forces, subject-matter experts and local community leaders
- in austere environments
- where disconnected far-forward users are the rule, rather than the exception.

 Anyone wishing to participate in (or contribute to) Strong Angel is welcome to do so.

- We're on the web at:
 - www.strongangel.telascience.org
- Contact me at:
 - EricRasmussen@carebridge.org

Thanks very much for listening.

