



# PSYCHOLOGICAL OPERATIONS (PSYOP) & CYBER WARFARE

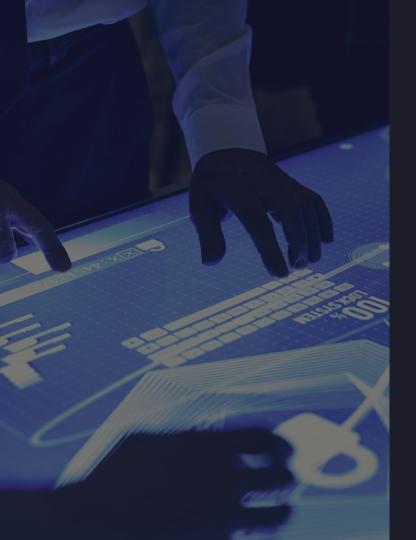
ปฏิบัติการทางจิตวิทยาและการโน้มน้าว หรือชิกจูงพ่านสื่อโซเชียล

**21** วันอังคารที่ 21 มีนาคม พ.ศ. 2566

ณ ห้องประชุมใหญ่ ชั้น 2อาคารสถานีวิทยุโทรทัศน์ทองทัพบทช่อง 5



คุณธนจักร วัฒนกิจ รองประธานความมั่นคงปลอดภัย ไซเบอร์และการวิเคราะห์ข้อมูล RV Connex



### **AGENDA**

- "Psychological Operations (Psyops) การสงคราม
   จิตวิทยา (Psychological warfare) Psy Ops and Cyber
   Warfare ปฏิบัติการจิตวิทยาที่อยู่ในพื้นที่ไซเบอร์"
  - 1. What is PsyOps and Cyber Warfare?
  - 2. The Defense & Security Industry
  - 3. Processes and Techniques
  - 4. Case Studies
  - 5. Effectiveness and Countermeasure
  - 6. Cybersecurity in the Public Sector

#### Sun Tzu

"Hence to fight and conquer in all your battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting."



### The Difference Between Traditional & Cyber War

Attribute	Traditional War	Cyber War		
Protagonists	Nations	Non-state Actors, Groups, Individuals		
Declared	Yes	No		
Geographic Boundaries	Yes	No		
Effects	Body Count, Property Damage, Land Occupied	Measureable or may be "flu" like		
Personnel	Military Forces	Varies from self-trained to state sponsored		
Equipment	Weapons	Internet Connection, COTS Hardware & COTS or easily obtained Software		
Targets	Chiefly Military	Government & Private Sector		

#### Cyberwar Skills are "Hard Skills"

- Malware management and development
- Network architecture
  - Configuration Expertise
  - Vulnerability Assessment
  - Information Assurance
  - More??



## Cyber War Example: Stuxnet How Stuxnet Worked



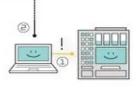
#### 1. infection

Stuxnet enters a system via a USB stick and proceeds to infect all machines running Microsoft Windows. By brandishing a digital certificate that seems to show that it comes from a reliable company, the worm is able to evade automated-detection systems.



#### 2. search

Stuxnet then checks whether a given machine is part of the targeted industrial control system made by Siemens. Such systems are deployed in Iran to run high-speed centrifuges that help to enrich nuclear fuel.



#### 3. update

If the system isn't a target, Stuxnet does nothing; if it is, the worm attempts to access the Internet and download a more recent version of itself.



#### 4. compromise

The worm then compromises the target system's logic controllers, exploiting "zero day" vulnerabilities-software weaknesses that haven't been identified by security experts.



#### 5. control

In the beginning, Stuxnet spies on the operations of the targeted system. Then it uses the information it has gathered to take control of the centrifuges, making them spin themselves to failure.



#### 6. deceive and destroy

Meanwhile, it provides false feedback to outside controllers, ensuring that they won't know what's going wrong until it's too late to do anything about it.

#### The PSYOP Mission

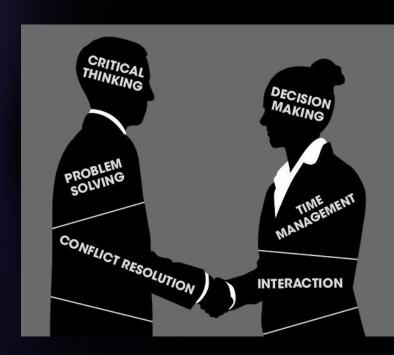
The mission of PSYOP is to influence the behavior of foreign target audiences (TAs) to support U.S. national objectives.

PSYOP accomplish this by conveying selected information and/or advising on actions that influence the emotions, motives, objective reasoning, and ultimately the behavior of foreign audiences.

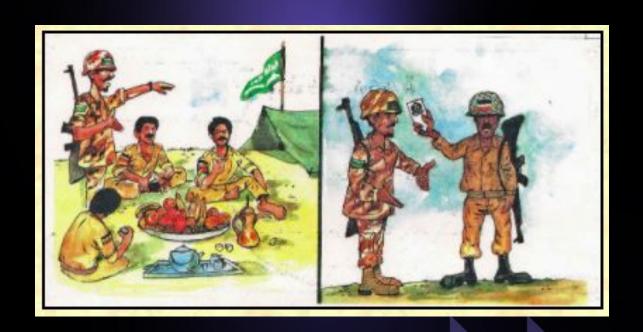


#### PSYOP Skills are "Soft Skills"

- Human Psychology
- Sales & Marketing TTP
- Media Fundamentals
- Cultural & Linguistic Skills
- More??



### Operation Desert Storm PsyOps



### Korean DMZ PsyOps





#### When are PsyOps Used?

Figure 16. Examples of Russian memes used to disrupt the U.S. Presidential election



never forget that the Black Panthers, group formed to protect black people from the KKK, was dismantled by us govt but the KKK exists today





#### PsyOps Techniques : Disinformation

Operation INFEKTION was a Soviet KGB disinformation campaign to influence opinion that the U.S. invented AIDS



### PsyOps Techniques : Misinformation



Shocked by murder of Afghan civilians & prisoners by Australian soldiers. We strongly condemn such acts, &call for holding them accountable.



12:02 PM · Nov 30, 2020 · Twitter for Android

### PsyOps Techniques : Propaganda







### PsyOps Techniques : Opposing Information



## How to conduct PsyOps : Step 1 : Planning and the Intelligence Preparation of the Battlespace

	P Political	M Military	E Economic	S Social	I Infrastructure	Information
A Areas	District Boundary, Party affiliation areas	Coalition/ANSF bases, historic ambush/IED sites	Bazaar areas, livestock dealers, auto repair shops	Traditional picnic areas, bazaars, outdoor shura sites	Irrigation networks, water tables, areas with medical services	Radio/TV/pape coverage areas word of mouth gathering point
S Structures	Provincial / District centers, Shura halls, Polling sites	Provincial / District police HQ, INS Known leader house/business	Bazaar, Wheat storage, Banks	Mosque, Wedding halls, Popular restaurants	Roads, bridges, Electric lines, Gabion walls, dams	Cell, radio, TV Towers, Print shops
C Capabilities	Dispute resolution, Local leadership, INS ability to have impact	ANSF provides 24/7 security? QRF present? INS strength / weapons	Access to banks, Ability to stand drought? Development	Strength of tribal/village traditional structures, Mullahs	Ability to build / maintain roads, walls; check dams, irrigation systems	Literacy rate, availability of electronic media, Phone service
O Organization	Political parties, INS group affiliation, Gov & NGO org.	Coalition/ANSF present, INS groups present	Banks, large landholders, Merchants, money lenders	Tribes, class, families, sport, shuras, youth shuras	Government ministries, Construction companies	News organizations, influential mosques, INS IO groups
P People	Governors, councils, elder mullahs, parliamentarians	Coalition, ANSF, INS military leaders	Bankers, land- holders, merchants, money lenders	Mullahs, Maliks, elders, Shura members, Influential families	Builders, road contractors, local development councils	Media owners mullahs, maliks elders, heads of families
E Events	Elections, Shuras, Jirgas, Provincial council meetings,	Kinetic events, unit RIPs, loss of leadership, operations	Drought, harvest, business openings, loss of business,	Friday prayers, holidays, weddings, deaths, births, bazaar days	Road/bridge construction, well digging, center/school construction	Friday prayers publishing dates, IO campaigns, project opening CIVCAS

good/bad crop

## The Study helps us to understand

- History of the country, region and people
  - Natural Environment
- Culture
- Political System
- Economy
- Military
- Ideology
- Religion
- National Interests
- Ethnicity

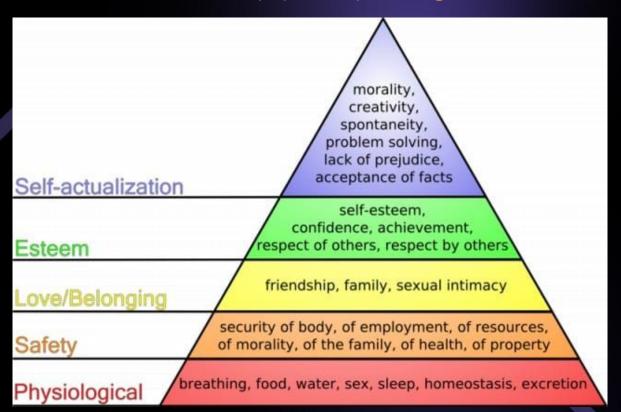
incidents

#### How to conduct PsyOps : Step 2 : Determine PsyOps Objectives



- Is the PsyOps goal to reduce acts of violence against friendly forces
- To ease tensions between ethnic group?
- Influence the local population to vote in elections
- Influencing the enemy to surrender
- Mass Social Engineering

#### How to conduct PsyOps : Step 3 : Target Vulnerabilities



## Maslow's Hierarchy of Human Needs

- Critical Needs : Needed to satisfy life (food, air, water, shelter)
   Short-term Needs :
- Short-term Needs:

   Could lead to critical
   needs (money, medical)

   Long-term Needs:
- Long-term Néeds: Including freedoms (self-expression and creativity)

Tips: Use more than one needs:)

Now, we know what are our target's vulnerabilities

### How to conduct PsyOps : Step 4 : Access your Target Audience



#### How to conduct PsyOps : Step 5: Determine the PsyOps Product

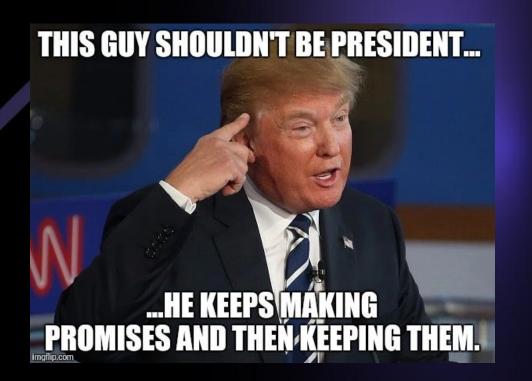




### Visual PsyOps Products

- Posters
- Flyers
- Podcasts
- Leaflets
- Videos
- Social Media / Internet images
- Newspapers
- Magazines

#### What are Memes?





#### Memetic Warfare : an invisible greatest PsyOps Threat

#### MEMETIC WARFARE - PART II

#### **Hacking Hearts and Minds**

How Memetic Warfare is Transforming Cyberwar

**OPEN Publications** 

Volume 1 I Number 6 I Spring 2017



OPEN PERSPECTIVES EXCHANGE NETWORK

#### MEMETIC WARFARE - PART I

## IT'S TIME TO EMBRACE MEMETIC WARFARE

**OPEN Publications** 

Volume 1 | Number 5 | Spring 2017





NATO ALLIED COMMAND TRANSFORMATION

### Defending Against PsyOps : Most Important thing : Mass education



How Finland starts its fight against fake news in primary schools

How Finland starts its fight against fake news in primary schools | Finland | The Guardian

