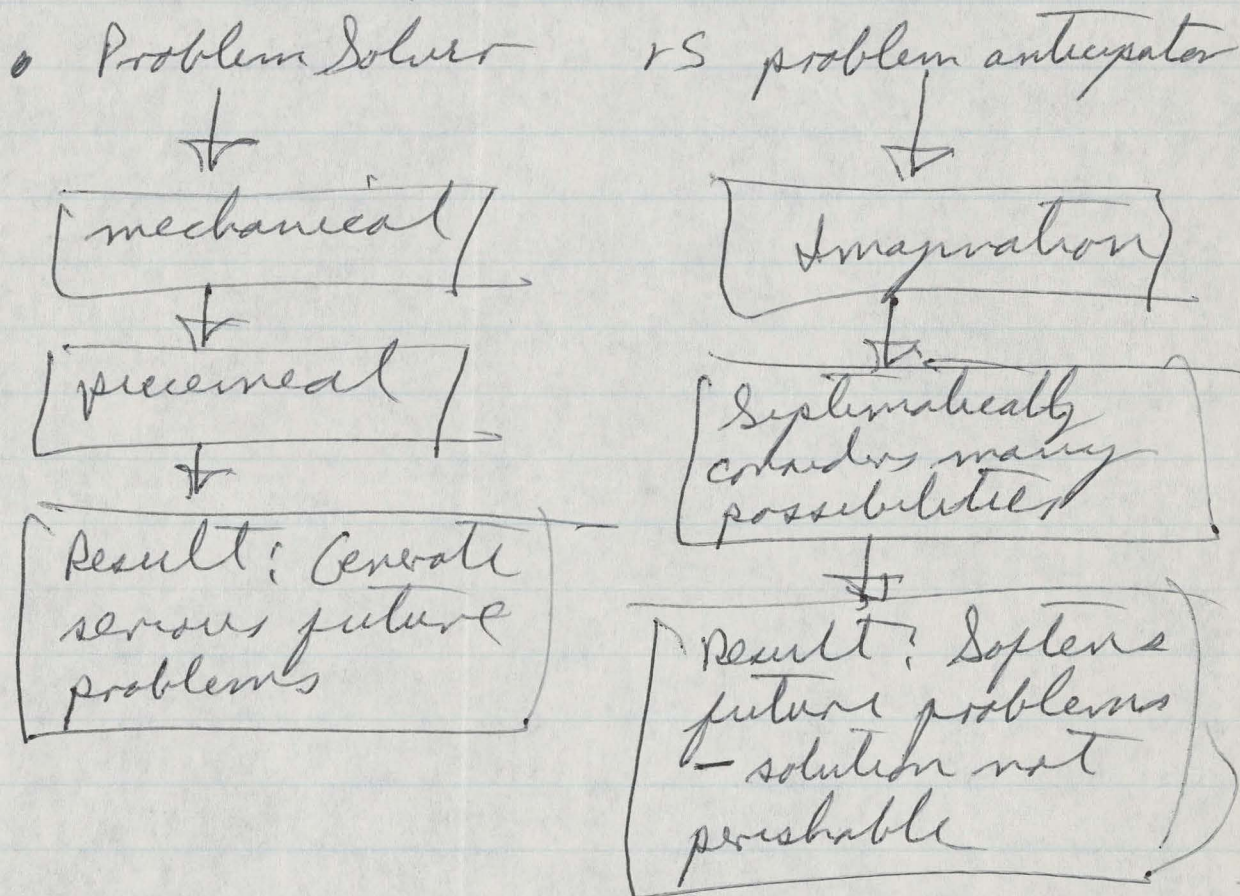


I

- Theme - Imagination/Creativity
 - Issue - How do you get there?
- History - Observations
 - F-X / F-15 60K-40K VS-FW
 - LWF - Pierre Sprey - 1976 STOWS
 - ~~Snowmobile~~
 - Engines - Gene Stanbach and GE credit
 - Snowmobile
- Controversial
 - Approach labeled controversial - couldn't possibly work.
 - Today - Defended by the Establishment as showcase programs - hence now not controversial
- Question - How did this happen?
- Example as an ~~answer~~ answer to this question
 - Planning joke

11

- Key Point:
 - Anticipate problem rather than just solve problems.



- Let me provide deeper insight by addressing nature of question I ask & see it -
 - Purpose of question
 - Value judgement

III

- Importance of Definition
- How does this apply to imagination and creativity
 - Build definition - politics
 - Leadership
- Creativity Argument
 - first crucial step - unstructure
 - second crucial step - check for reversibility
 - * Analyses only one side of problem - can only existing problems
- Support for this view
 - G. H. 2nd Law
 - Rigid 'Thought'
- Summary - Ben Leaps comment

I

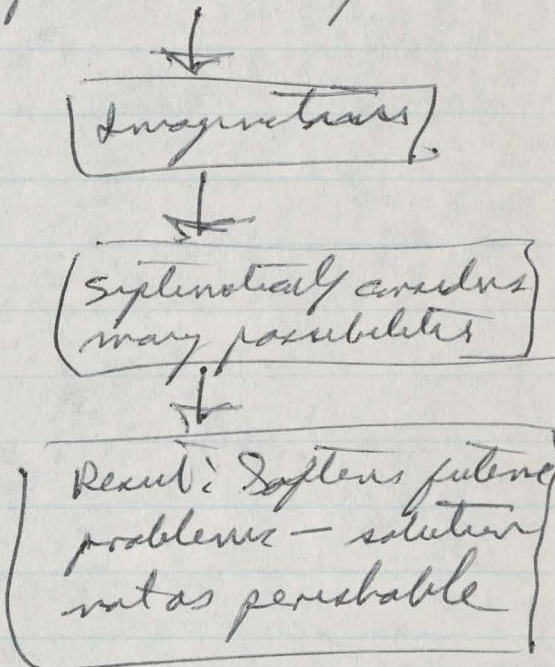
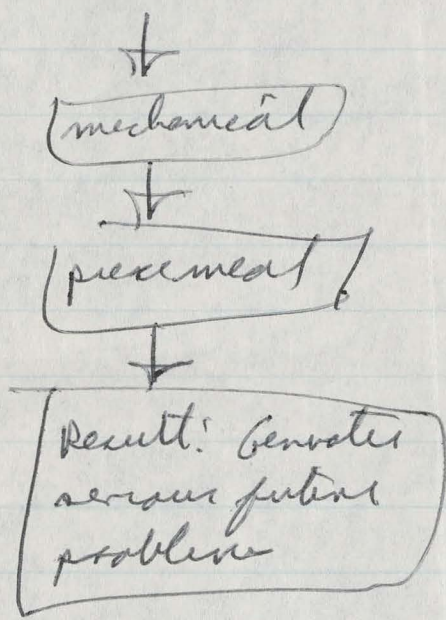
- Theme - Imagination/Creativity
 - Issue - How do you get there?
- History - ~~Examples~~ Observations
 - F-15 - 90000th I need many ICB
 - LWF - Pierre Sprey - 1970 St Louis
 - ~~Snowmobile~~ less than 25000th
- Controversial
 - Approaches labelled controversial - couldn't possibly work
 - Today - Defended by Establishment or showcase programs - hence now not controversial.
- ~~How~~ Question? How did this happen?
- Example as answer to this question
 - Planning joke -
 - Point

Key Point:

• [Key Point:]

- ~~Must be a problem~~ anticipate problems.
- Anticipate problem rather than just solve problems.

• Problem solver VS problem anticipator



- Let me provide a deeper insight by addressing the ~~status~~ ^{quality} of a question and ~~response~~ ^{Purpose of question?}
 - Why do we ask questions?
 - Get a response
 - Make value judgement

- ~~Build~~ Importance of Regulator.
- How does this apply to imagination and creativity
 - Build definition of politics
 - politics
 - leadership
 - management
- Creativity Argument
 - first crucial step - unstructure
 - second crucial step - check for reversibility
- ~~Real~~ Support for the view
 - Godel, Heronby, 3rd Law of Thermodynamics
 - Project Insight - see previous sheet.
- Address ? of what SC, NTC, Steadily, to as supposed to do.

I

Philosophy / Psychology

19 Sept

- Definition argument
- ✓ • Creativity argument
 - Unstructured thought
 - Education contradiction
- ✓ • goal/obstacle argument
 - Dialectic/Obstacle argument
- Purpose of question
- Importance of definition
- ✓ • Implication of Should
- ✓ • Organization argument
 - * confront external forces or threat
 - * laws/rules provide framework for permitting that organization to function $\hookrightarrow$ (ROTH) real reason for them
- ✓ • Analysis / Synthesis
 - Integrity / Courage

II

Philosophy / Psychology

19 Sept

✓ • A posteriori vis-a-vis A priori

✓ • ~~Deductions~~

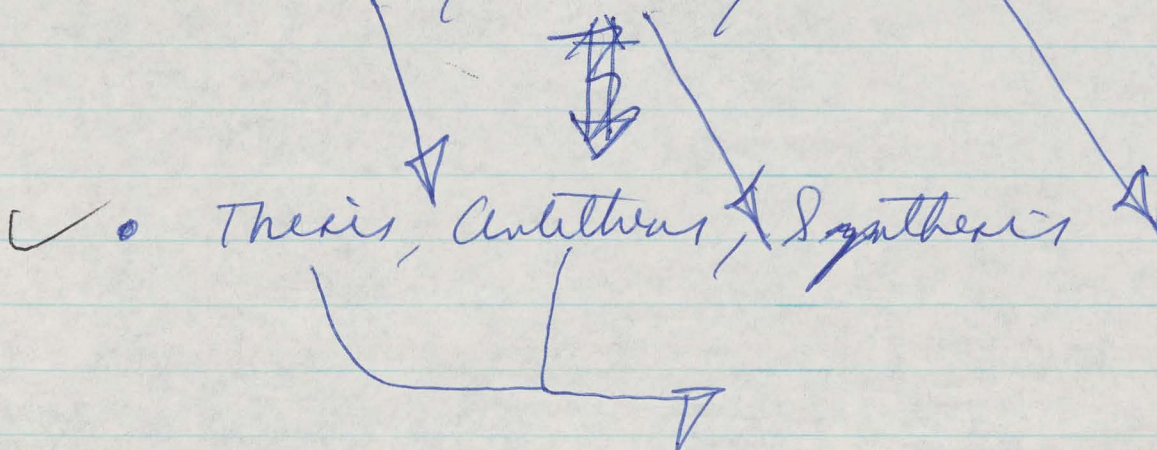
- Disassemble disassemble
- Reach a known goal

✓ • Inductions

- Assemble
- Uncover a new goal.

• ~~Academic~~

✓ • Deduction / Induction / Reduction



• Evolution / Revolution

• Induction synapses

- Synthesis - unstructured thought - a posteriori development
- Analysis - structured thought - a priori approach
- Is it advantageous to have Nixon or ~~H~~ & Coover as the next president (from communist viewpoint)



UNITED STATES AIR FORCE

NAKHON PHANOM RTAFB ANNIVERSARY OBSERVANCE DAY--SEPTEMBER 17, 1972

Schedule Of Events

1400 - 1600

TUG - O - WAR

A tournament event featuring 20-man teams from each unit. Units should contact Capt. Hanna at ph 2118 to enter team.

1400 - 1600

**WATER BUFFALO
RACE**

This race features a rider from each unit. Units should contact Lt. Clagget at ph 2114 to enter contestant.

1400 - 1700

DUNKING BOOTH

Dunk your favorite commander for details contact Lt. Rabaja at ph 2929.

1600 - 1700

BICYCLE RELAY

Relay teams from units compete against each other. Units contact Capt. Ferenczhalmay at ph 3311 or 3050 to enter team.

1600 - 1715

**ALL STAR FOOTBALL
GAME**

Base All-Stars from American and National Leagues compete.

1730 - 1800

MISS NKP SELECTION

Each unit sponsors a Thai girl in native dress to compete for Miss NKP. Units contact Capt. Cestari at ph 2637 to enter the unit contestant.

5) ROE - survival (organize to face external threat) or force laws or rules provide the framework for functioning of that organization to

1800 -

THAI BOXING EXHIBITION

Tentative event for additional information contact Lt. Zerull at ph 2720.

1830 - 1850

FORMAL RECOGNITION

A proclamation of the significance of the day by Col. Simon.

1850 - 1900

FIREWORKS DEMONSTRATION

The close of the planned base wide activities. Contact MSG Senior at ph 3512 if you desire additional information.

6) Education contradiction
Analysis/Syntheses
ADDITIONALLY, The clubs, NCO, OFFICER and USO, are planning special dinner and other activities.

Unit Project Office rs will meet at 1600 hrs, 11 Sept 1972 in the 56 SOW Conference Room.

Survival

- 1) Definition argument
- 2) Creativity argument
- 3) goal - obstacle argument
- 4) dialectic argument

Unstructured thought
integrity / courage

- 2) Purpose of question
- 3) Importance of definition
- 4) Implication of should

T-T-D

T

- Purpose of question
- Importance of definition
- Definition Argument
- Creativity Argument
 - Unstructured thought
 - Education contradiction
- Analysis/Synthesis
 - first crucial step - Unstructure
 - second crucial step - purify
- goal/obstacle argument

• Induction
unstructured
a posteriori
open ended



goal is unknown
objective = uncover
(creativity)

|

Deduction
Structured
a priori
closed system

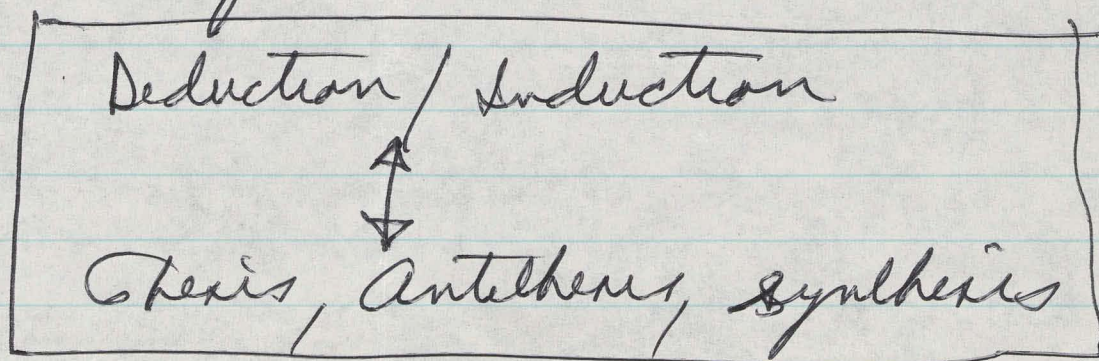


goal is known
objective = reach
(reason)

T-T-D

- Inductance [synapses]
- Implication of should
- Evaluation / revaluation
- organizational argument
 - confront external threat - survival
 - laws, rules - framework to permit organization to function
 - Why ROE? —
- Dialectic Argument
 - Opposites
 - thesis, antithesis, ~~synthesis~~
- Relation of
 Deduction / Induction
 ↓
 Thesis, Antithesis, ~~synthesis~~

- Inductive synapses
 - relation of synapses to neurons
 - why you shouldn't drink
- Implication of should
- Evolution/revolution
- Organizational argument
 - confront external threat
 - laws, rules - framework to permit organization to function
 - Why ROE?
- Dialectic argument
 - Opposites
 - Thesis, Antithesis, synthesis
- Relation of:



- Deduction/Induction — related to rate of change
- Thesis, Antithesis, Synthesis — ~~relations~~ related to a position

Conclusion: ?

- Deduction/Induction provides the basis for dynamic learning
- Dialectic (thesis, antithesis, ~~synthesis~~) are positions within the learning process

Prospective Club Officer

Majoi Hailan Marshall
from Tan Son Nhut

II

- A posteriori vs A priori
- Deductions
 - Disassembly
 - Reach a known goal
- Inductions
 - Assemble
 - Uncover a new goal
- Deduction/Induction/Deduction

~~II~~ I

• Theme = Imagination/Creativity

• How do you get these

• ~~How not to get them~~

• History - Examples

• F-15 - 40000th Fuel Wing

• ~~WWF~~ - Pure Joy - 1970

• ~~Snowmobile~~ - less than 25000

• Controversial used to depict these approaches

• Today they are now defended by the Establishment - therefore not controversial - as showcase programs = (not controversial)

• Snowmobile

• Question - Why are we here?

~~To be controversial!~~ - Partially

~~Real Reason?~~

→ How did this happen

• Goal or Aim -

Capacity for Independent Action

(Survival) - yes - (Given our

you're yes

Why are you here

But what has this led to

thought that

upcoming

might be

selected

with cost

II

- o Purpose of question
 { sample } { coding
 { positive

o

- o What is Imagination / Creativity
 { argument

o

- o First crucial step — Unstructure
 o Unstructure

- o Second Crucial Step — Check for
 "reversibility"

- o What happens if you do not
 unstructure, to meet problems
 — (Godel, Herstein, 2nd law —

— Compound problems.

- o Survival directly related to ability to
 unstructure / structure.

- o Point: Be adaptable not well
 adapted to environment

↳ Good & Beautiful —→

speech
• Planning The

• Analysis vs Synthesis

↓
Logic
Hardware

↓
Discretization
Interpolation

speech experiences

• Purpose of {

• Localization of sound

• Politics at the end — otherwise
we are only admitting that
interested in ~~uncovering~~ ~~are~~
a tainted solution,

- Instead of talking about High Technology what we so rarely hear talking about is high cost technology

- Simplify instead of sophistication - to make less simple

- Chief, See AF, Slay - indicated that we have turned around the cost explosion

✱ a misrepresentation in recovery or argument

- Fly before buy - will be buy after we fly - no! unless it does what it is intended to do - or better and cheaper

o Bad Decision Costs

Speech

2

- End of the Age of Aquarius!
 - What is Age of Aquarius?
 - When did it start?

•

~~100~~

100

Speech

~~2000~~ • Mirage 2000 > F-16

• Twin Engine } opt end design (boat and)
can be as much as 100% off in estimates

•

X

• ~~by these~~

• If we need T-38's or F-5's to train with because "Combat Fighters are too experienced in peace time - Does this not raise the question: Can we ~~the~~ ~~use~~ the combat fighters in combat

Can we afford to use the combat fighters in wartime?

Politics: The art of manipulating people for advantage

Leadership: The art of inspiring people to enthusiastically take action toward achieving uncommon (~~uncommon~~) goals.

Management: The art of manipulating (or exploiting) people and resources to produce desired results.

Analysis: A method for understanding ^{or} a general ~~concept (or idea)~~ ^{activity} as a result of ~~identifying and establishing~~ the interrelating relationships among the fundamental ~~steps~~ (or elements) that make up the ~~general concept (or idea)~~ that general activity

• Politics: The art of manipulating people for advantage

• Leadership: The art of inspiring people to take action toward achieving uncommon (or extraordinary) goals.

• Management: The art of manipulating (or exploiting) people to achieve ~~some purpose~~ desired results.

• Analysis: A method for understanding ^{as general activity} ~~concept (or idea)~~ as a result of identifying the fundamental issues and understanding the fundamental issues (or elements) that make up the ~~concept or idea~~ general concept or idea.

Ref

Personal for S/Col Robert F. Prussitt from Col John R. Boyd.

Would like meaningful job. No objection to coming back to the Pentagon

Dialectics

- Revolution — rapid changes characterized by significant disorder and violence
- Evolution — slow changes characterized by greater acceptance of change with significant reduction in social upheaval.

Note : • Key difference between Revolution and evolution is rate of change

- Key difference in results impact as amount of social upheaval and disorder generated.

17 Aug 72

T-T-D

MAIN

Σ • Given: $P_s = K$, $P_s/\dot{w} = K$ or $\dot{w} = \min$
Find: $\dot{\theta}_{\max}$, $(\dot{\theta}/\dot{w})_{\max}$

D • Given: $P_s = K$, $\dot{\theta} = K$
Find: $\Delta \dot{\theta}_{\min \max}$, $\Delta P_s = \min \max$

• Given $P_s = K$ $\dot{\theta} = K$
 $\Downarrow$ $\Downarrow$
 $(\Delta \dot{\theta}, \Delta t)_{\max}$ $(\Delta P_s, \Delta t)_{\max}$
 $\parallel$ $\parallel$
MSTA $\Rightarrow (\Delta \dot{\theta}, \Delta t)_{\max}$ or $(\Delta P_s, \Delta t)_{\max}$

where, $\left(\frac{\Delta \dot{w}}{\dot{w}}\right)_F \leq \left(\frac{\Delta \dot{w}}{\dot{w}}\right)_H$

- THEME — Change
- History — Brief rundown of period in AF
- Goal or Aim
- Action / Decisions
- Unstructure / Structure
 - Whole to Part → Disorder
Destructive
 - Part to Whole → Creative
Constructive
- Raises ? Can we think of fundamental AF activities that exhibit these Unstructure / Structure ~~Activities~~ Tendencies
 - Systems Analysis / Planning
 - The two opposing activities should work in harmony
 - Recent emphasis has been on analysis side — which produces disorder.

Must think ahead —
can not wing it

◦ Need more emphasis on coherent planning — achieve Order



- Development Planning Joke

- Examples of Unstructure / Structure
 - Snowmobile
 - F-15
 - F-16
- Equal Sign Vs Related Sign
- Academy Depts
 - Officers required to produce concepts, designs, Organizations i.e. Comprehensive W holes to cope with changing environment
 - Cannot just ~~produce~~ reproduce what already exists. — We'll fall back

- o Theme - Change
- o History - brief rundown of my period in AF
- o Basic Goal or Aim
- o Action / Decisions
- o Unstructure / Structure
 - o Whole to Part → ^{Disorder} Destructive
 - o Part to Whole → ^{Order} Creative Constructive
- o Pairs? - Can we think of fundamental AF activities that exhibit these Unstructure/Structure tendencies

- o Systems Analysis / Planning
 - The two opposing activities should work in harmony.
 - Recent emphasis has been on analysis side - which produces disorder

Must think ahead & arrange layers very well

Need more emphasis on cohesion & coherent Planning - Achieve some kind of order.

- o Development Planning Job
- o Examples of ~~Analysis~~ ^{Unstructure / Structure}
 - F-15, F-16, Sparrowhawk

II

o Equal Sign vs Related Sign

o Academy pests.

o Officer required to produce concepts, designs, organizations, ~~as~~ ~~what~~ Comprehensive Wholes to cope with changing environment

o ~~Don't~~ Cannot just reproduce what already exists - or put another way, "Intellectually, the hell out of the existing framework"

Cul Boyd

18 Jan 72

QUESTIONS

- * What maneuvers used? Basis for maneuver selection?
- * What control logic is placed upon maneuvers to assure "appropriate" maneuver execution. Basis for control selection?
- * What terminal attack trajectories used? Basis for trajectory selection?
- * What maneuvers used to counter missile trajectories? Basis for these countermaneuvers?
- * What regions (H, M, E_S) used for maneuver employment. Basis for correlation of maneuvers with region of maneuver employment?
- * What decision logic is used for maneuver selection and region for employment. Basis for selection? When accomplished?
- * How has the program been changed over the past three years or more? Basis for change.
- * How has decision logic been changed to account for different maneuver emphasis and/or change of maneuver control logic or reorientation of region for maneuver employment.
- * If decision logic has not been changed -- Why not? If decision logic has been changed what is basis for change?
- * What impact do the following have on results or on selecting new designs (parametric investigation).
 - maneuver selection
 - maneuver control logic
 - terminal attack trajectories
 - countermaneuver to terminal attack or missile trajectories
 - maneuver region orientation
 - decision logic to identify relative maneuvers and region for employment

col Boyd

18 Jan 72

ANALYSIS

* Identify

- best maneuver region (s)
- superior maneuver strategies
- superior terminal attack trajectories
- superior aircraft (or configuration with appropriate T/W, W/S combinations)

SIMULATION/FLIGHT TEST

* Evaluate (or verify)

- selection of maneuver region (s)
- selection of maneuver strategies
- selection of attack trajectories
- selection of superior aircraft (or configuration with appropriate T/W, W/S combinations)

Questions

- What maneuvers used? Basis for maneuver selection?
- What control logic is placed upon maneuvers to assure "appropriate" maneuver execution. Basis for control selection?
- What terminal attack trajectories used? Basis for trajectory selection?
- What maneuvers used to counter missile trajectories? Basis for these countermaneuvers?
- What regions (H, M, E_S) used for maneuver employment. Basis for correlation of maneuvers with region of maneuver employment?
- What decision logic is used for maneuver selection and region for employment. Basis for selection? When accomplished?
- How has program been changed over past two to two and one-half years? Basis for change.
- How has decision logic been changed to account for different maneuver emphasis and/or change of maneuver control logic or reorientation of region for maneuver employment.
- If decision logic has not been changed -- Why not? If decision logic has been changed what is basis for change.
- What impact do the following have on results or on selecting new designs (parametric investigation).
 - maneuver selection
 - maneuver control logic
 - terminal attack trajectories
 - countermaneuver to terminal attack or missile trajectories
 - maneuver region orientation
 - decision logic to identify relative maneuvers and region for employment