Safety Management Systems . . .
. . . . the Road to Implementation

Helen & Martin Kimmel Center
Manhattan, New York
24 Mar, 2006

MISTAKES

IT COULD BE THAT THE PURPOSE OF YOUR LIFE IS
ONLY TO SERVE AS A WARNING TO OTHERS.

What did SMS look like when ACTS began to get involved?

- Transport Canada only had ideas of what they wanted

- They briefed us on the goals, and we started to build it

- Expertise from the branches all contributed to *"where we thought we needed to be"*

- But our world was really our world**s**

ACTS
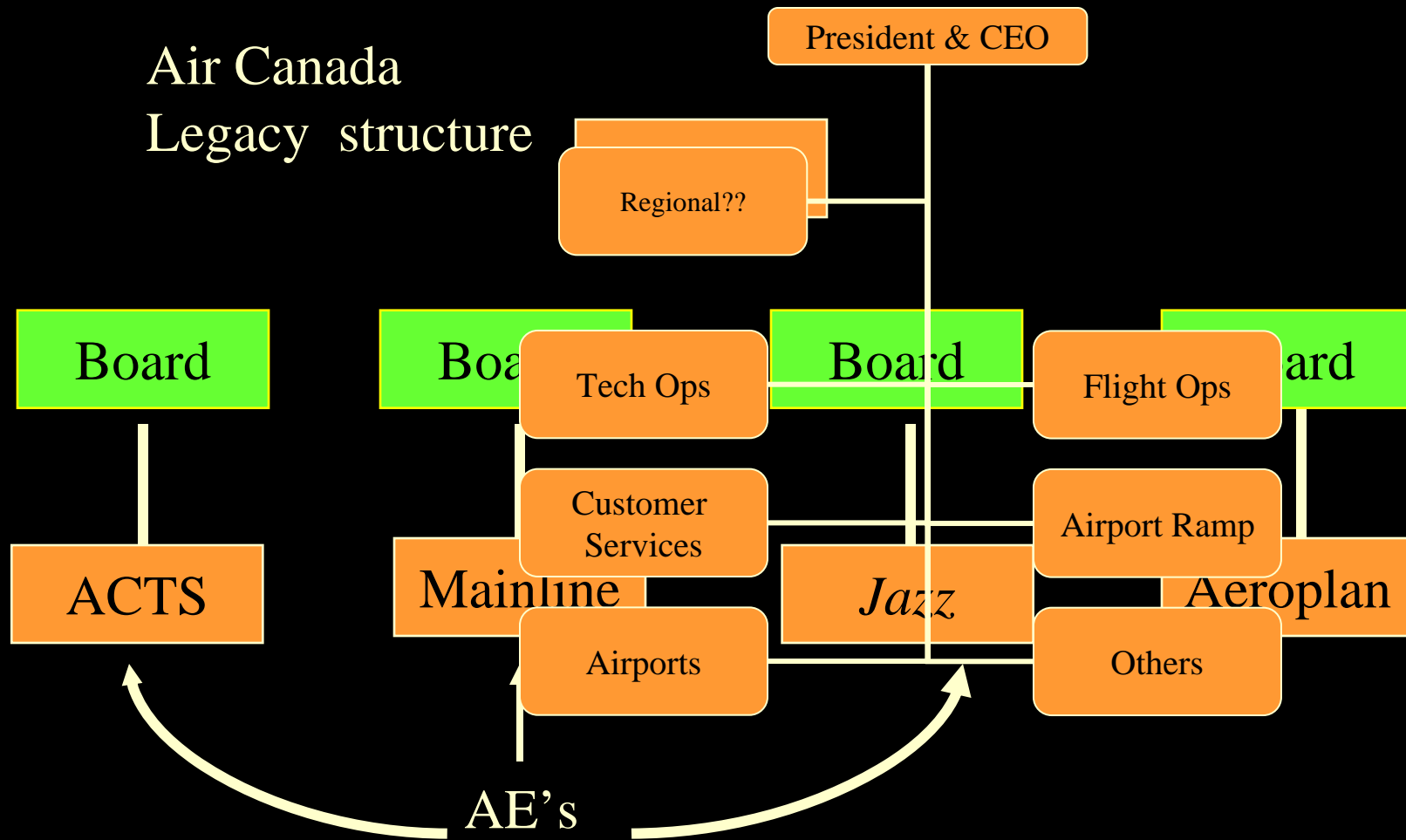Air Canada Technical Services

Where are we today?

So far, as an independent within ACE we have:

- Re-aligned to match our new corporate structure
- established a quality-safety monitoring team(s)
- published our SMS manual(s)
- defined the data collection system requirements

- In my opinion, we're about here:

X ⟶ **DONE**

Corporate Structure ????

Air Canada Legacy structure

Board	Board	Board	Board
ACTS	Mainline	Jazz	Aeroplan

President & CEO

Regional??

Tech Ops

Flight Ops

Customer Services

Airport Ramp

Airports

Others

AE's

ACTS
Air Canada Technical Services

What we're gonna do today

- QA - AOSH & the rest ⟵
- Making it really work
- Group Mechanics
- Building Common Understanding

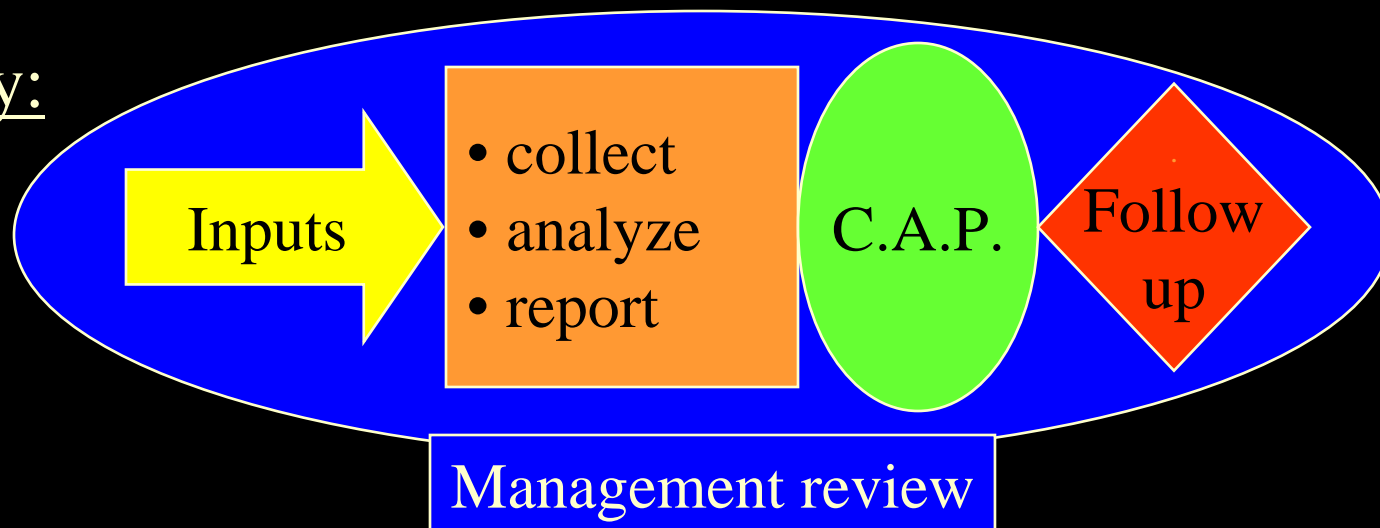# SMS - *the Quality Assurance Piece*

Common Misconception:

- Quality Assurance only deals with production quality issues

Reality:

Inputs → collect, analyze, report → C.A.P. → Follow up

Management review

Any exception can be used as an input

CARs

Advisory

Guidance

CLC *II*
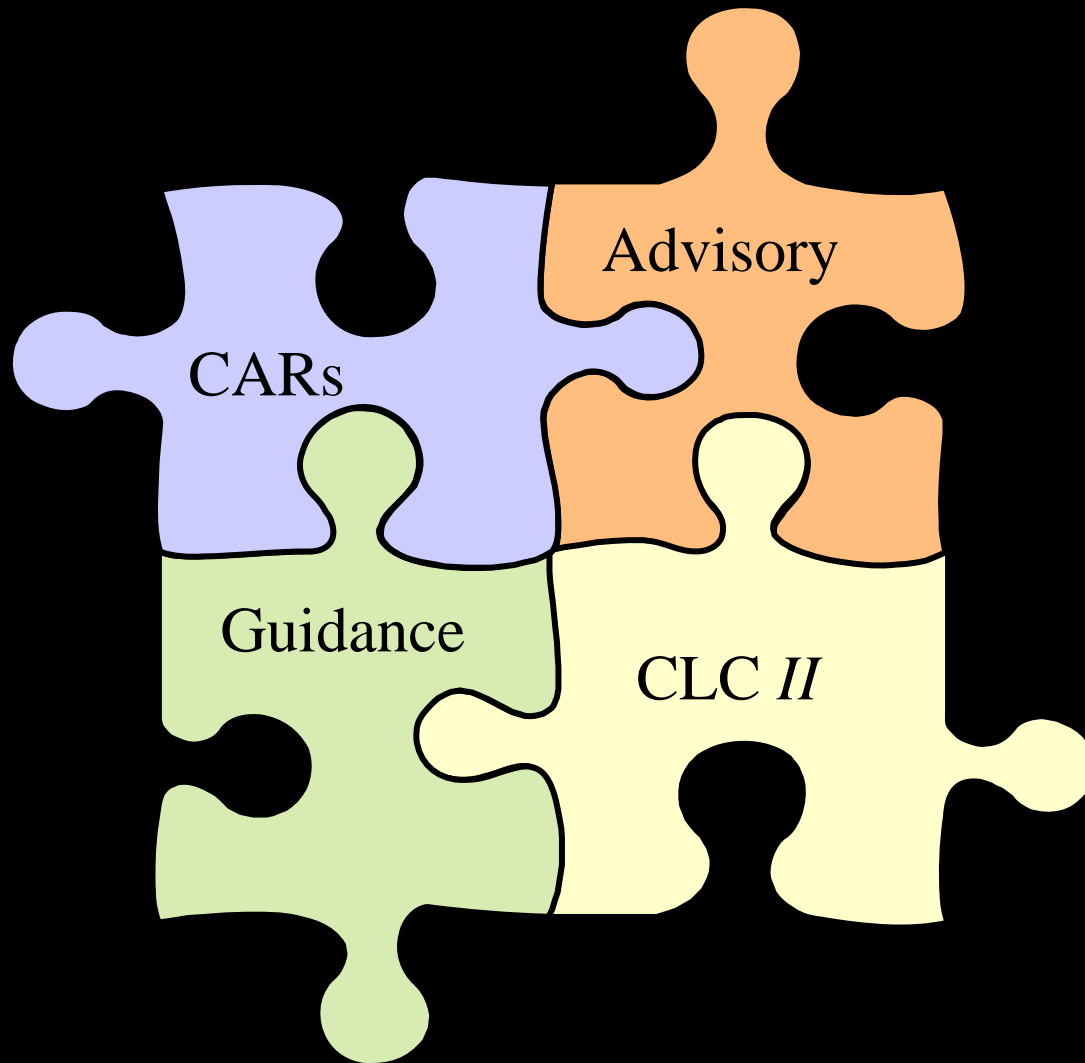
Are you prepared to provide the answers?

ACTS

Air Canada Technical Services

SMS – OSH – *where should we go*

Companies need to develop a _want to_ strategy

- Managers need to understand these rules

- We need to get predictive in data collecting

We need to DO SOMETHING with the reports:

- reports should feed the SMS database to implement & track corrective actions

ACTS®
Air Canada Technical Services

What we're gonna do today

- QA - AOSH & the rest
- Making it really work   ⟵
- Group Mechanics
- Building Common Understanding

ACTS
Air Canada Technical Services

So what's the real secret

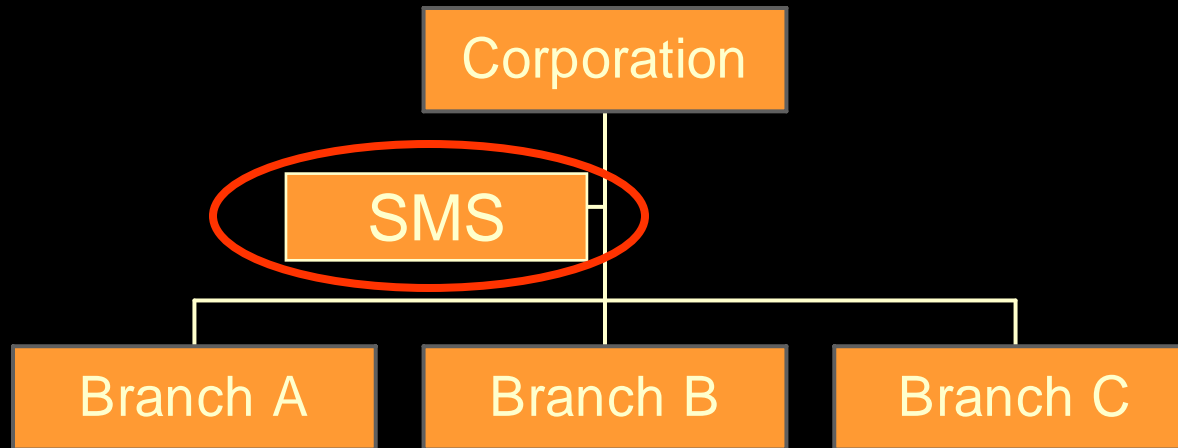- Keeping the principles straight, and allowing for variances as needed.

- So what is the key principal:
  - the production areas must be accountable and responsible for safety

What is one thing SMS is not?

An excuse to build a corporate safety committee *(spelled **e-m-p-i-r-e**)* that:

- usurps accountability from established management channels

- acts as the "safety cops"

- dictates policy downwards

What's Acceptable

```
        ┌─────────────┐
        │ Corporation │
        └─────────────┘
               │
        ┌─────────────┐
        │     SMS     │
        └─────────────┘
               │
   ┌───────────┼───────────┐
┌──────────┐ ┌──────────┐ ┌──────────┐
│ Branch A │ │ Branch B │ │ Branch C │
└──────────┘ └──────────┘ └──────────┘
```

SMS can be here only if :
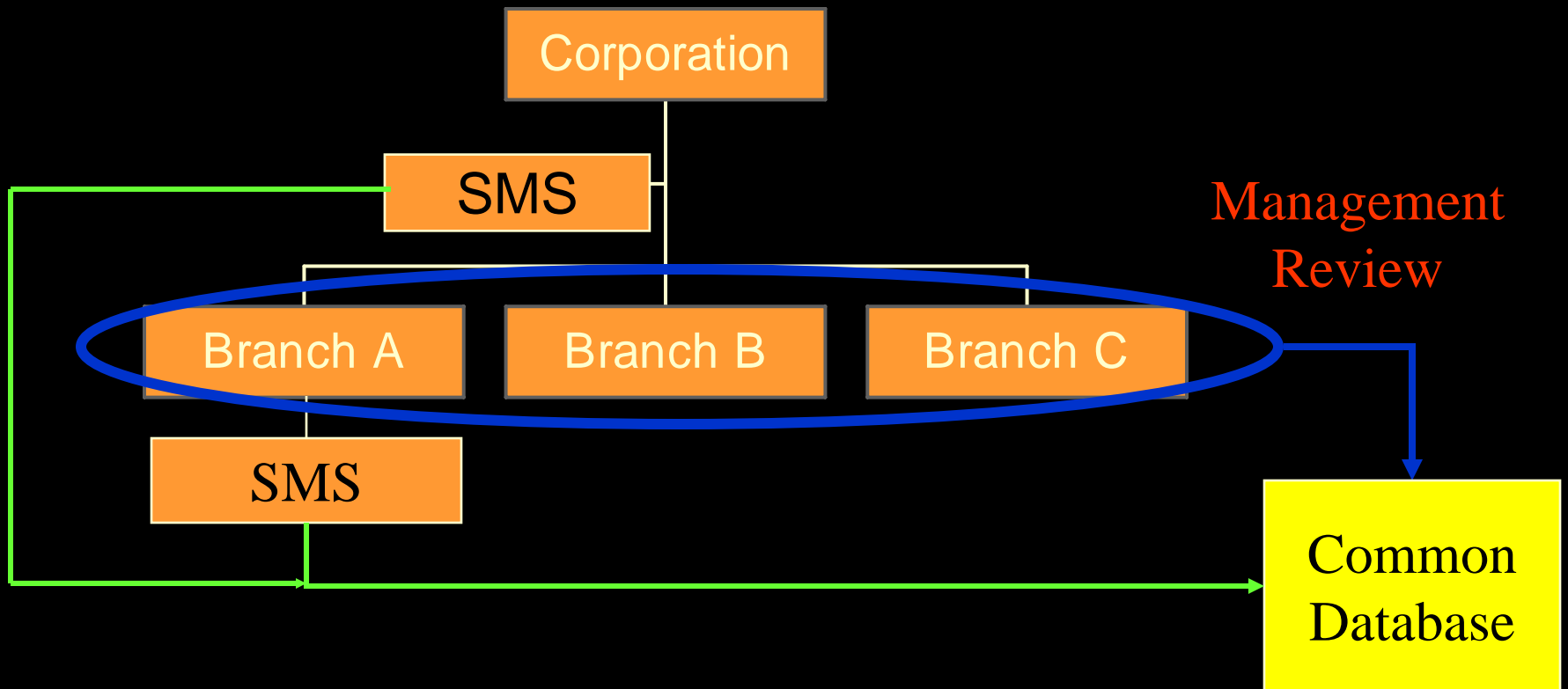
a) it's role is limited to data collection & reporting

b) all reports are filed with branch management for handling

c) other than trends, nothing gets to the corporation unless all attempts
    to fix it within the branch have been exhausted.

ACTS

What's Acceptable
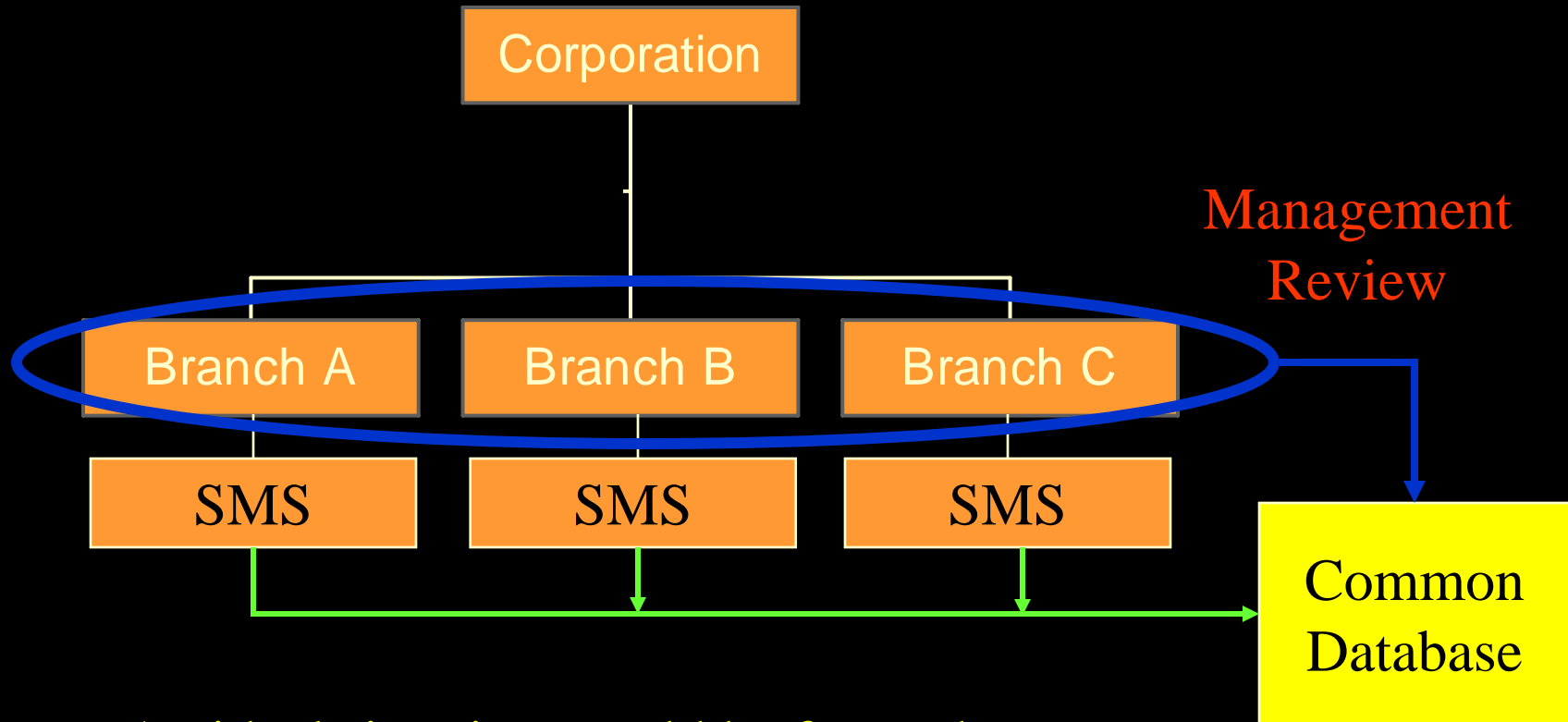
An ideal situation would be for each branch to handle its own SMS issues

Or maybe a hybrid is required

What we're gonna do today

- QA - AOSH & the rest
- Making it really work
- Group Mechanics ⟵
- Building Common Understanding
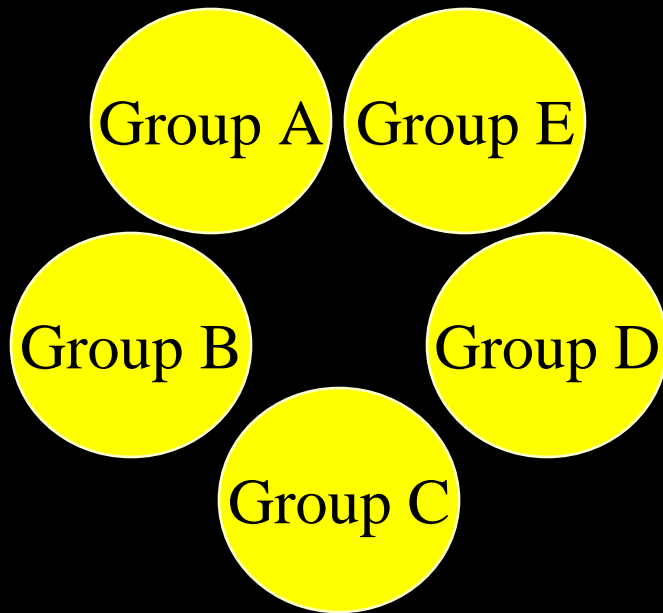
ACTS
Air Canada Technical Services

Group Mechanics

Group A Group E

Group B Group D

Group C

- perceived hierarchies
- sub-group dynamics
- degree of exposition
- areas of expertise

ACTS ®
Air Canada Technical Services

Group Mechanics - *perceived hierarchies*

Maintenance Certificate (CAR 573)

Air Operator Certificate CAR 705)

Air Operator Maintenance Support CAR 706)

Corporate Safety

Flight Operations

Corporate Security

Cargo Operations

Technical Operations

Airport Ramp Ops

Airport Customer Ops

Inflight Customer Ops

Flight Safety

ACTS®
Air Canada Technical Services
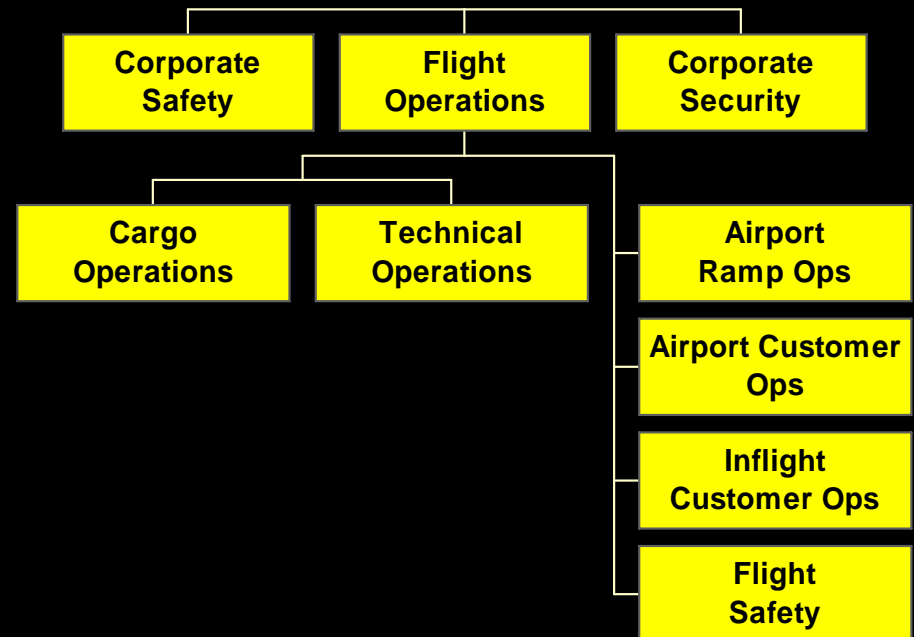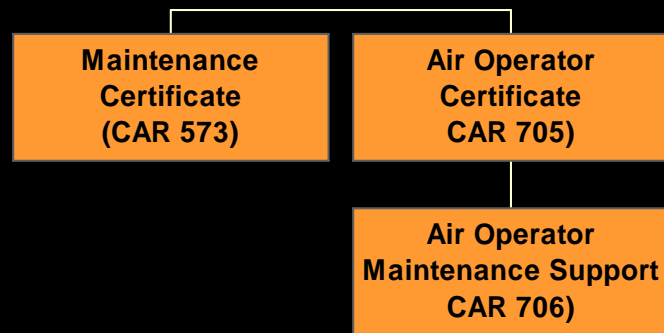
Group Mechanics - *degree of exposition*

Flight Ops			
Technical Ops	**Flight Safety**	**Corporate Security**	**Airport Ramp Ops**
Corporate Safety	**Inflight Ops**	**Cargo Ops**	**Airport Counter Ops**
highly regulated	moderately regulated	Becoming [Note 1] regulated	not regulated
highly documented	moderately documented	slightly documented	little documentation

Note 1: this requirement changed dramatically following 9/11

ACTS
Air Canada Technical Services

Group Mechanics - *sub-group dynamics*

	Union	Relationship	Qualifications	Leadership
Branch A	Yes	Cordial	Licensed	Command
Branch B	Yes	Partnership	Licensed	Collaborative
Branch C	No	N/A	Professional	Limited Consultation
Branch D	No	N/A	Licensed	Advisory
Branch E	Yes	Strained	Highly Trained	Command
Branch F	Yes	Strained	Some Training	Limited Consultation

ACTS®
Air Canada Technical Services

Group Mechanics - *areas of expertise*

Flight Ops	Documented SOPs
Technical Ops	Quality Assurance & Quality Systems
Corporate Safety	AOSH and environmental compliance
Flight Safety	Voluntary, non-punitive reporting

Group Mechanics - the result

Stimulus

Response

Filters

- attitudes
- values
- group filters
- past group history
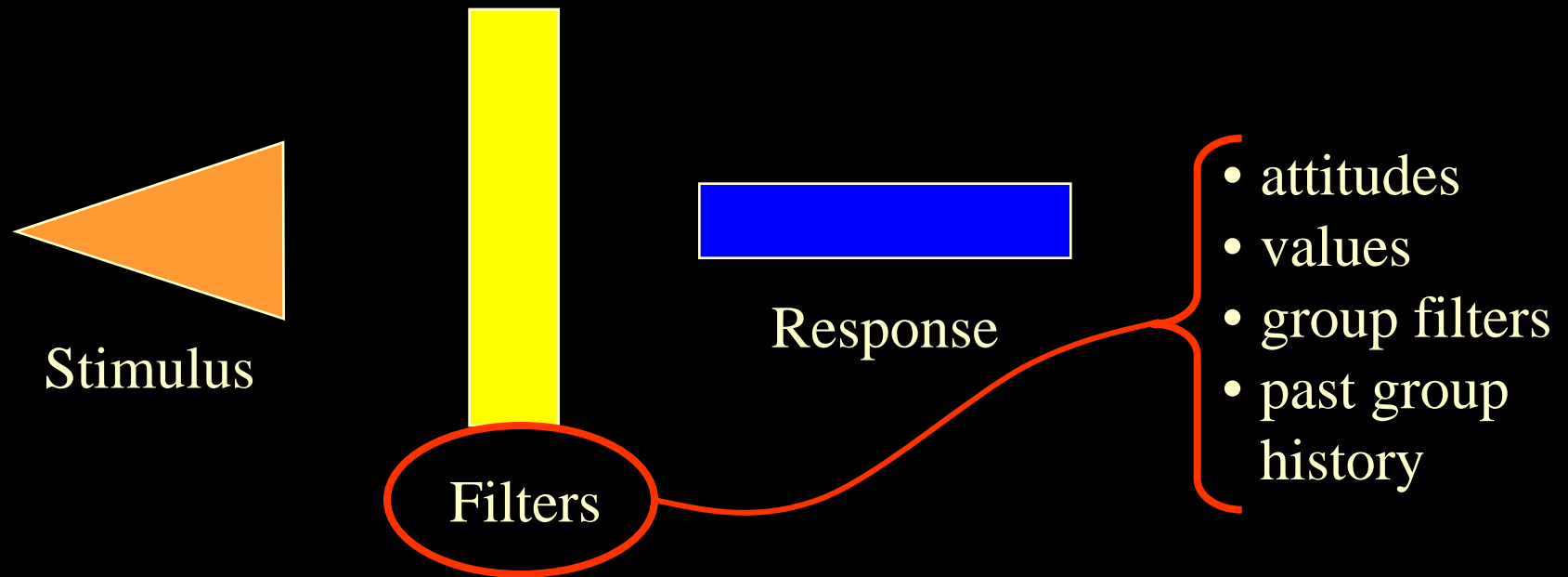
Lots of room for misunderstandings

ACTS
Air Canada Technical Services

What we're gonna do today

- SMS - what it is
- QA - AOSH & the rest
- Making it really work
- Group Mechanics
- Building Common Understanding

ACTS
Air Canada Technical Services

Building Common Experience

- Try to get to know the players, and determine how they think.

- This will require trust:
  - ask for it, until you're proven wrong
  - explain the process you'll be using
  - explain how things will be approved

Building Common Experience

- Use Covey: start with the end in mind
  - If you don't know the end, share the principles with the team and develop the end
  - Do a GAP analysis
  - design the hole fillers
  - implement

- But what do you do about old history that they won't let go?

ACTS
Air Canada Technical Services

Consider adopting a Parking Lot

Building Common Experience

- Put all controversial issues into the Lot
  - legitimate concerns that need to be fixed
  - "baggage" about how things went wrong before

- deal with legitimate items as your process develops

- at the end of the session, go to the Parking Lot & confirm all issues were handled.

ACTS®
Air Canada Technical Services

Review - Here's what we did today

- QA - AOSH & the rest
- Making it really work
- Group Mechanics
- Building Common Understanding

ACTS

Air Canada Technical Services
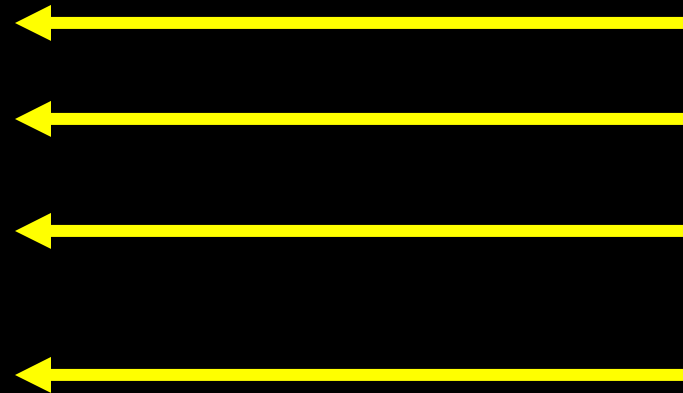
One last thing:

- For real safety to work, it must start at the very top & work its way down

  ☐ True

  ☐ False

ACTS
Air Canada Technical Services

Thank You