Individual differences and interpersonal relationships
How do we judge other persons?
How do we communicate?

Interpersonal relationships
We are born with a broad potential of range of abilities which is changed by environment conditions and events when growing up.

Biological/genetic (NATURE) – the potential personality

Personality

Self-concept

Self-evaluation

Environmental conditions and events:

social origin - success – education – past experience

(NURTURE)
What is personality?

Definition:
The relative **stable** and **resistant** behavioral characteristic of a person that is important in the relationship with others.
Behavior

(depending on circumstances / other person and motivation)

Personality (partly genetic) +
Attitude (not genetic)
(learned believing and feeling about objects)
– specific or general
Assessing Personality by appearance or dress (Sheldon theory)

- **ENDOMORPH**
  - easy going
  - social
  - self indulgent

- **MESOMORPH**
  - physically hard
  - restless
  - energetic
  - insensitive

- **ECTOMORPH**
  - fragile
  - introspective
  - sensitive
  - nervous

Assessed by appearance
But is it correct?
Dimensions of personality
(measured by the way a person behave)

- Extraversion
- Introversion
- Anxiety
- Warmth
- Sociability
- Impulsiveness
- Though-mindedness
- Dominance
- Stability
- Boldness

- Boldness - Impulsive behavior - sociability
- Emotional instability - tension - suspiciousness
The two dimensional Model of Personality (based on questionnaires)

- DANGER (tend to underperform)
  - Sober - rigid
  - Pessimistic

- DANGER (taking risk)
  - Aggressive
  - Changeable
  - Impulsive

- INTROVERSION
  - Controlled
  - Thoughtful

- EXTRAVERSION
  - Responsive
  - Easy going

- ANXIETY

- STABLE

- Ideal?
Hans Eysenck theory of personality (PEN Model)

- Extroversion
- Introversion
- Stable
- Anxiety ➪ Neuroticism (tendency of Sympathetic System to act too quickly – score high on the neurotic scale)

Risk of a neurotic disorder if subjected to a great deal of STRESS
In cockpit - teamwork
Interactive style

Depending on circumstances

Personal style of members: authoritarian – democratic – autocratic - submissive etc.
Interactive style in team work
When working as a team towards a common goal
The individual in Team/Group

Belonging to a group implies that certain characteristics are shared
(goals - values - interests – motives)

GROUPTHINK

Danger ?

Too much cohesion may lead to retention of information in fear of distressing the group
Factors determining the effectiveness of a team and interpersonal behavior:

- Ability (competence)
- Status (flight deck status)
- Role (handling/non-handling)
- Cohesion (sum of forces binding crew members together)
Group decision making

A decision reached by a group will be better than the average decision made by individuals within the group

Danger ?
Factors affecting the group

- Conformity (problem: social expectation)
- Compliance
- Status and Obedience
- Persuasions (should not be used in cockpit)
- Risky Shift
- Group Duration
- Role and Norm
- Co-ordination and Co-operation

Group decision making
How to improve group decision?

- Avoid arguing for your personal judgment
- Avoid changing your mind to avoid conflict
- Avoid conflict-reducing techniques
- View differences of opinion as helpful

In aviation:
Further improvement with LOFT and CRM especially when using video tape (feedback)
Leadership

Definition:
The ability to get work done with and through others, while at the same time winning their confidence, respect, loyalty and willing cooperation.

It can be learned and developed
What is the characteristic of a good leader?

- Social maturity
- Self motivation
- Achievement orientation
- Self-confidence
- Communications skills
Principles for Leaders
(to obtain best results and maintain the moral of the team)

- Avoid indications of own opinion at the outset
- Encourage crew member to express ideas and any doubts or objections
- Explain the reasons for a decision
Principles for both leader and group members

- Don’t delay airing uncertainties and anxieties
- Give your point of view fully and clearly
- Don’t give opinion in a emotionally or dominant way
- Do not become “ego involved” with your own point of view
- Do not let others progress down wrong paths
- Do not let your own bad mood show
Chinese proverb

Tell me and I’ll forget
Show me and I may remember
Involve me and I’ll understand
Leadership/Managerial Grid Theory
Blake and Mouton (1964)

The concept of leaders will vary from 1 to 9 in their concern for people and getting things done giving five main styles of leading
LEADERSHIP GRID

<table>
<thead>
<tr>
<th>Country Club</th>
<th>Task</th>
<th>Authoritarian</th>
<th>People</th>
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- Production is secondary to the avoidance of conflict (G- P+)
- Ideal (G+ P+)
- Makes only the least effort required to remain in the organization (G- P-)
- Regard colleagues as a means of production (G+ P-)

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Leadership in cockpit: The Authority Gradient

✈ The Autocratic Cockpit

✈ The Laisser-Faire Cockpit

✈ The Synergistic Cockpit
The Authority Gradient

- Decides and imposes his/her decisions without consultation
- Takes no account of the opinions of the other members for the crew
- Rarely delegates
- Makes general comments which teach nothing
- Does not listen and is isolated from the rest of the crew
- Considers forcefully made suggestions as either criticism or insubordination
- Encourages a tense and non-communicative atmosphere in the cockpit
The Authority Gradient

Problem:

→ The captain gets overloaded
→ Aggression is met with aggression
→ Nothing more than necessary is said
→ Unexpressed aggression is turned against a third person
→ Aggression is delayed and will be suddenly and unexpectedly released
The Authority Gradient

- Remains passive
- Allows other members of the crew freedom in decision-making
- Makes few suggestions
- Makes neither positive or negative judgments
- Encourages a relaxed and laid-back atmosphere in the cockpit with communications leaning towards non-professional objects
- Has a primary aim to please the rest of the crew (G-P+)
The Authority Gradient

Problem:

» Another member of the crew takes over the leadership

» Members of the crew work on their own ⇒ no CRM
The Authority Gradient

- Leads by example
- Motivates the crew
- Develops the skills of the crew
- Supports team working
- Clearly communicates intentions and required standards
- Monitors the crew performance and gives constructive advice
- Co-ordinates interrelated activities concerning the flight
- Listens to the rest of the crew and looks upon their suggestions as helpful
- Make decisions with the help and active participation of the other crew members
- Make a plan of action defined by the group
- Delegates responsibilities and actions
- Shares information and explains decisions
- Tries not to over-participate leaving each member of the crew to show their worth and capabilities
- Works to maintain a positive, cordial and professional cockpit atmosphere throughout the flight
- Openly shows appreciation for work well done
- De-briefs the crew and encourages ideas for improvements
The Captain’s task:

Maintain the authority gradient without losing the support of the crew members