NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

Excerpts from Empire ATR 42 Pilot Handbook (Task sharing / Post Accident)

(3 Pages)

ATTACHMENT
47

TASK SHARING

The organization of general task sharing follows the principles stated in this paragraph. The PF keeps his functions throughout the emergency procedure. Radio communication can be transferred from PNF to PF while performing QRH checklist. During an in flight emergency or abnormal event, the PF assesses the situation and then suggests a course of action, which is to be validated by the Captain.

Task Sharing	PNF	PF
Flying and Aircraft Configuration		●
Navigation		●
Checklists	●	
Communication	● During QRH use, the PF should communicate	

- **Priority Management** – especially during emergency or abnormal conditions the crewmember in charge of a task maintains a strict priority of application:

  – **Fly the aircraft** – airspeed, flight path, configuration

  – **Navigate the aircraft** – situational awareness: where are you, where should you be, where are the terrain and obstacles

  – **Communicate** – inform ATC of situation and intentions

  – **Manage** – aircraft systems and performance of checklist procedures:

    - **Understand the problem before acting** – wrong decisions often result of incorrect identification of problem

    - **Assess risk and time pressure** – take time when possible; consider delay vector, holding pattern, or go around

    - **Evaluate the available options** – use CRM to gather information

- **Match response strategy to the condition** – is condition emergency (immediate action) or abnormal (may tolerate delayed action)

- **Consider all implications** – of failed systems, prevailing conditions, airport proximity

- **Plan for contingencies** – the what ifs, leave yourself an out

- **Manage workload** – adhere to defined task sharing

- **Create shared problem by communications** – the crew needs a common and well-understood objective

&CAUTION: There is increased vulnerability to error when tasks must be performed concurrently or out of normal sequence. Some countermeasures are:

- Recognize vulnerability to making errors,
- Manage workload and timing of tasks,
- Develop personal cues or techniques to remind of deferred or interrupted tasks.

- **Decision Making** – The Captain has the final decision making authority and responsibility.

- **In Flight Power Management** – PF manages POWER LEVERS or asks for setting if necessary. PNF manages CONDITION LEVERS.

- **Aircraft Control** – Captain may decide to change PF (in case of a TCAS RA event for instance), announce "I HAVE CONTROL" or "YOU HAVE CONTROL".

- **Checklist Priority** – while performing a failure procedure use the QRH procedure(s) or the following sequence:

- EMERGENCY
- NORMAL
- ABNORMAL (Procedures Following Failure)

- **Confirmation** – critical actions or irreversible actions are to be accomplished by the PNF after confirmation by the PF.

- **One Head Up** – ensure always that at least one crewmember is heads up, controlling and monitoring the aircraft flight path.