SOTUGERES

Société Tunisienne de gestion des risques en établissements de santé

5ème Édition des Journées de la Qualité des Soins et de la Sécurité des Patients

La *standardisation* du langage: outil inspiré de l'aéronautique.

Le 08 novembre 2019

Dr Jérôme Cros

Limoges France


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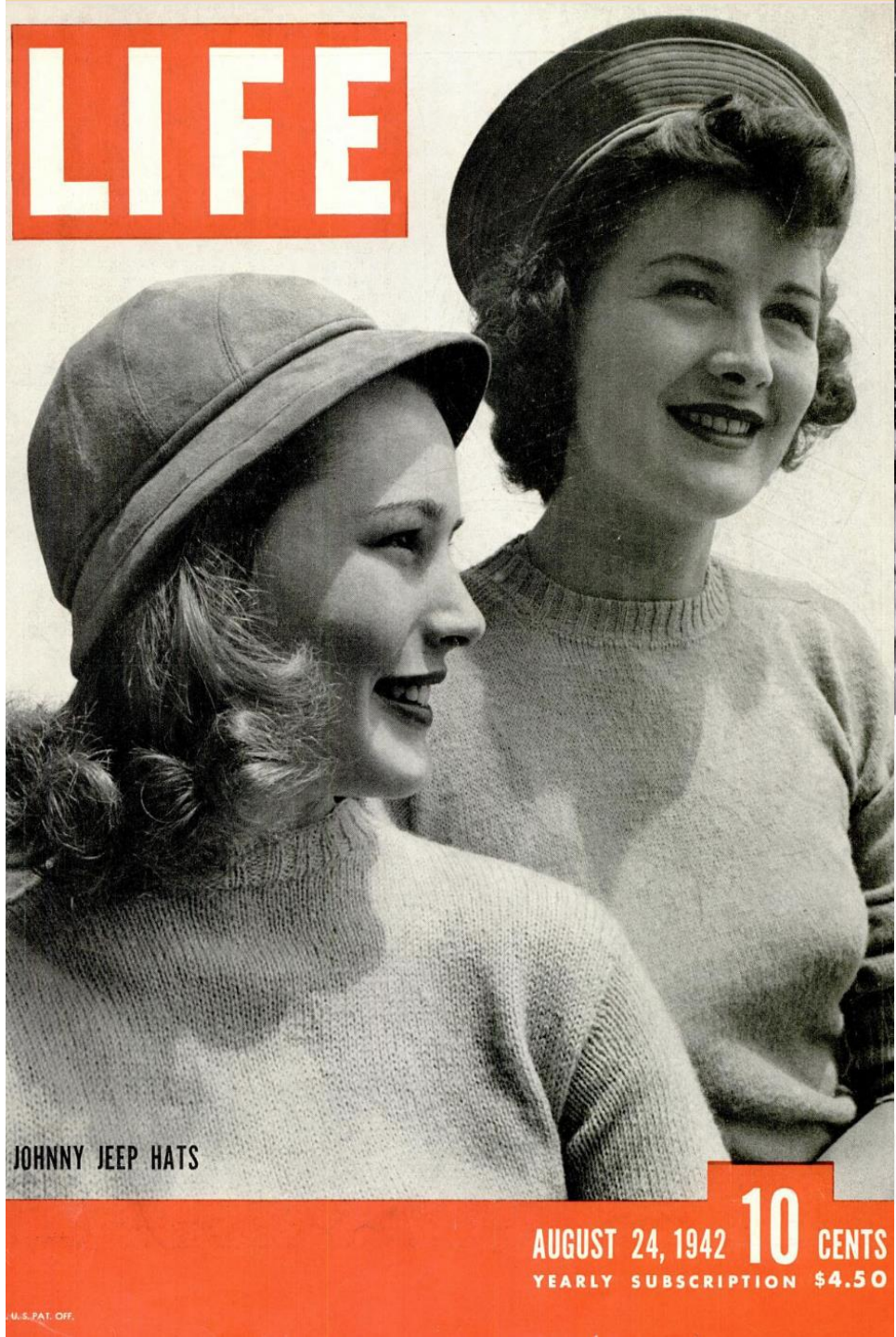
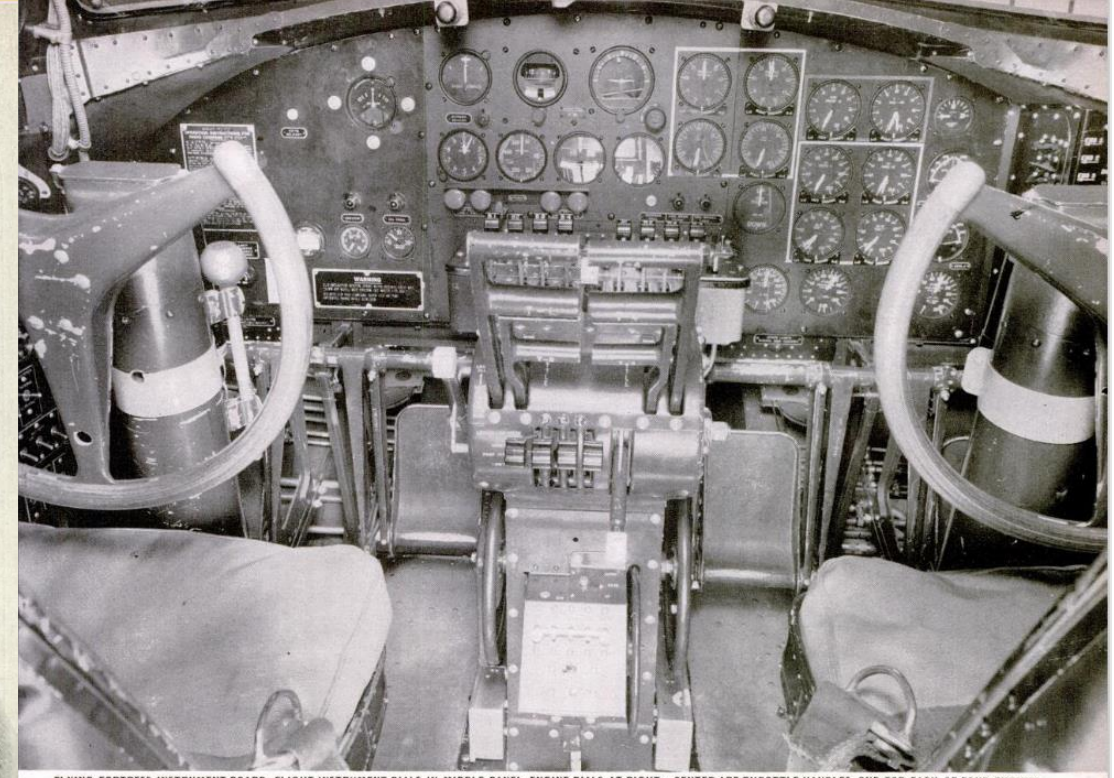
13372





FLYING FORTRESS INSTRUMENT BOARD: FLIGHT INSTRUMENT DIALS IN MIDDLE PANEL, ENGINE DIALS AT RIGHT. CENTER ARE THROTTLE HANDLES, ONE FOR EACH OF FOUR ENGINES

COCKPIT CONVERSATION

Pilot and copilot check on everything before taking on the complicated job of flying a four-engine bomber

Every day now, at some U. S. Army Air Force School, some training pilot is learning how to handle a four-engine bomber. He climbs into the big plane, crowds into the left-hand cockpit seat and there is confronted by the big and complicated instrument board shown above. Under his hands are bunches of buttons and levers. At his side sits a copilot. By manipulating the levers, pushing the switches and watching the instrument dials, he learns the complex job of piloting a Flying Fortress. Ready to take off, he checks with the copilot and this is the conversation that always follows:

"Check list," says the pilot. His copilot fishes out a printed form from a briefcase.
"Gear switch?" asks the copilot.
"Neutral," replies the pilot.
"Fuel-transfer valves and pump?"
"Off."
"Hydraulic pressure?"
"Okay."
"Hydraulic selector is normal. Intercoolers are cold. Hand primer is off. Parking brake is on. Gyros?"
"Uncaged."
"Cowl flaps are open right."
"Open left."
"Now locked. Fuel shut-off switches?"
"On."
"Booster pumps?"
"On."
"Superchargers?"
"Off."
"Throttles?"
"Closed."
"Propellers?"
"High R.P.M."
"Flight controls?"
"Unlocked, checked."
"Clear in front?"
"Okay left."
"Okay right," adds the copilot. "Master switch?"
"On."
"Ignition switches?"
"On."
"Battery switches?"
"On."
"Generator switches?"
"Off."
"Inverter?"
"On, alternate checked."
"Fuel quantity?"
"Sufficient."
"Fire extinguisher okay. Selector No. 1 engine on."
The pilot starts No. 1 engine. It protests, coughs, catches.
"Oil pressure No. 1?"
"Coming up."
They repeat starting procedure on engines No. 2, 3 and 4.
"Hydraulic valve normal," singsongs copilot. "Intercoolers, cold. Booster pumps?"
"On."
"Cowl flaps open right."
"Open left."
"Locked. Propellers?"
"High R.P.M."
"Battery switches?"
"On."
"Radio on. Mixture controls?"
"Automatic rich."
"Wing flaps, checked. Hydraulic pressure?"
"Okay."
"Trim tabs?"
"Set for take-off."
"Altimeter?"
"Set."
"Crew aboard?" yells the pilot back through the cavern of the bomber's interior.
"Aboard, sir" responds the crew chief.
The pilot presses a microphone to his mouth, checks with the control tower, receives permission to taxi out to the runway.
"Wheel chocks out right," says the copilot.
"Out left."
"Tail wheel unlocked. Brakes, standing by."
Clumsily, hesitantly, the bomber picks its way among planes on either side out to the border of the take-off runway.
"Brakes locked," drones the copilot.
"Magnetos?"
"Checked."
"Superchargers?"
"Set."
"Engines?"
"Run up."
"Flight controls?"
"Unlocked and free."
The pilot again checks with the control tower, receives permission to take off.
"Brakes?"
"Unlocked."
The plane creeps out on the runway, wheels into the wind.
"Tail wheel locked," says the copilot.
"Generators?"
"On."
Pilot grasps control wheel firmly with his left hand, four throttles with his right. Now—and only now—he is ready to lift the Flying Fortress into the air.

APPROVED B-17F and G CHECKLIST

REVISED 3-1-44

PILOT'S DUTIES IN RED

COPILOT'S DUTIES IN BLACK

BEFORE STARTING

1. Pilot's Preflight—COMPLETE
2. Form 1A—CHECKED
3. Controls and Seats—CHECKED
4. Fuel Transfer Valves & Switch—OFF
5. Intercoolers—Cold
6. Gyros—UNCAGED
7. Fuel Shut-off Switches—OPEN
8. Gear Switch—NEUTRAL
9. Cowl Flaps—Open Right—OPEN LEFT—Locked
10. Turbos—OFF
11. Idle cut-off—CHECKED
12. Throttles—CLOSED
13. High RPM—CHECKED
14. Autopilot—OFF
15. De-icers and Anti-icers, Wing and Prop—OFF
16. Cabin Heat—OFF
17. Generators—OFF

STARTING ENGINES

1. Fire Guard and Call Clear—LEFT Right
2. Master Switch—ON
3. Battery switches and inverters—ON & CHECKED
4. Parking Brakes—Hydraulic Check—On-CHECKED
5. Booster Pumps—Pressure—ON & CHECKED
6. Carburetor Filters—Open
7. Fuel Quantity—Gallons per tank
8. Start Engines: both magnetos on after one revolution
9. Flight Indicator & Vacuum Pressures CHECKED
10. Radio—On
11. Check Instruments—CHECKED
12. Crew Report
13. Radio Call & Altimeter—SET

ENGINE RUN-UP

1. Brakes—Locked
2. Trim Tabs—SET
3. Exercise Turbos and Props
4. Check Generators—CHECKED & OFF
5. Run up Engines

BEFORE TAKEOFF

1. Tailwheel—Locked
2. Gyro—Set
3. Generators—ON

AFTER TAKEOFF

1. Wheel—PILOT'S SIGNAL
2. Power Reduction
3. Cowl Flaps
4. Wheel Check—OK right—OK LEFT

BEFORE LANDING

1. Radio Call, Altimeter—SET
2. Crew Positions—OK
3. Autopilot—OFF
4. Booster Pumps—On
5. Mixture Controls—AUTO-RICH
6. Intercooler—Set
7. Carburetor Filters—Open
8. Wing De-icers—Off
9. Landing Gear
   a. Visual—Down Right—DOWN LEFT Tailwheel Down, Antenna in, Ball Turret Checked
   b. Light—OK
   c. Switch Off—Neutral
10. Hydraulic Pressure—OK Valve closed
11. RPM 2100—Set
12. Turbos—Set
13. Flaps ⅓—⅓ Down

FINAL APPROACH

14. Flaps—PILOT'S SIGNAL
15. RPM 2200—PILOT'S SIGNAL

World Health Organization

SURGICAL SAFETY CHECKLIST (FIRST EDITION)

Before induction of anaesthesia ▶▶▶▶▶▶▶▶▶ Before skin incision ▶▶▶▶▶▶▶▶▶▶▶▶▶ Before patient leaves operating room

SIGN IN

☐ **PATIENT HAS CONFIRMED**
- IDENTITY
- SITE
- PROCEDURE
- CONSENT

☐ **SITE MARKED/NOT APPLICABLE**

☐ **ANAESTHESIA SAFETY CHECK COMPLETED**

☐ **PULSE OXIMETER ON PATIENT AND FUNCTIONING**

DOES PATIENT HAVE A:

KNOWN ALLERGY?
☐ NO
☐ YES

DIFFICULT AIRWAY/ASPIRATION RISK?
☐ NO
☐ YES, AND EQUIPMENT/ASSISTANCE AVAILABLE

RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)?
☐ NO
☐ YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED

TIME OUT

☐ **CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE**

☐ **SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM**
- PATIENT
- SITE
- PROCEDURE

ANTICIPATED CRITICAL EVENTS

☐ **SURGEON REVIEWS:** WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?

☐ **ANAESTHESIA TEAM REVIEWS**: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?

☐ **NURSING TEAM REVIEWS:** HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?

HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?
☐ YES
☐ NOT APPLICABLE

IS ESSENTIAL IMAGING DISPLAYED?
☐ YES
☐ NOT APPLICABLE

SIGN OUT

NURSE VERBALLY CONFIRMS WITH THE TEAM:

☐ **THE NAME OF THE PROCEDURE RECORDED**

☐ **THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT** (OR NOT APPLICABLE)

☐ **HOW THE SPECIMEN IS LABELLED** (INCLUDING PATIENT NAME)

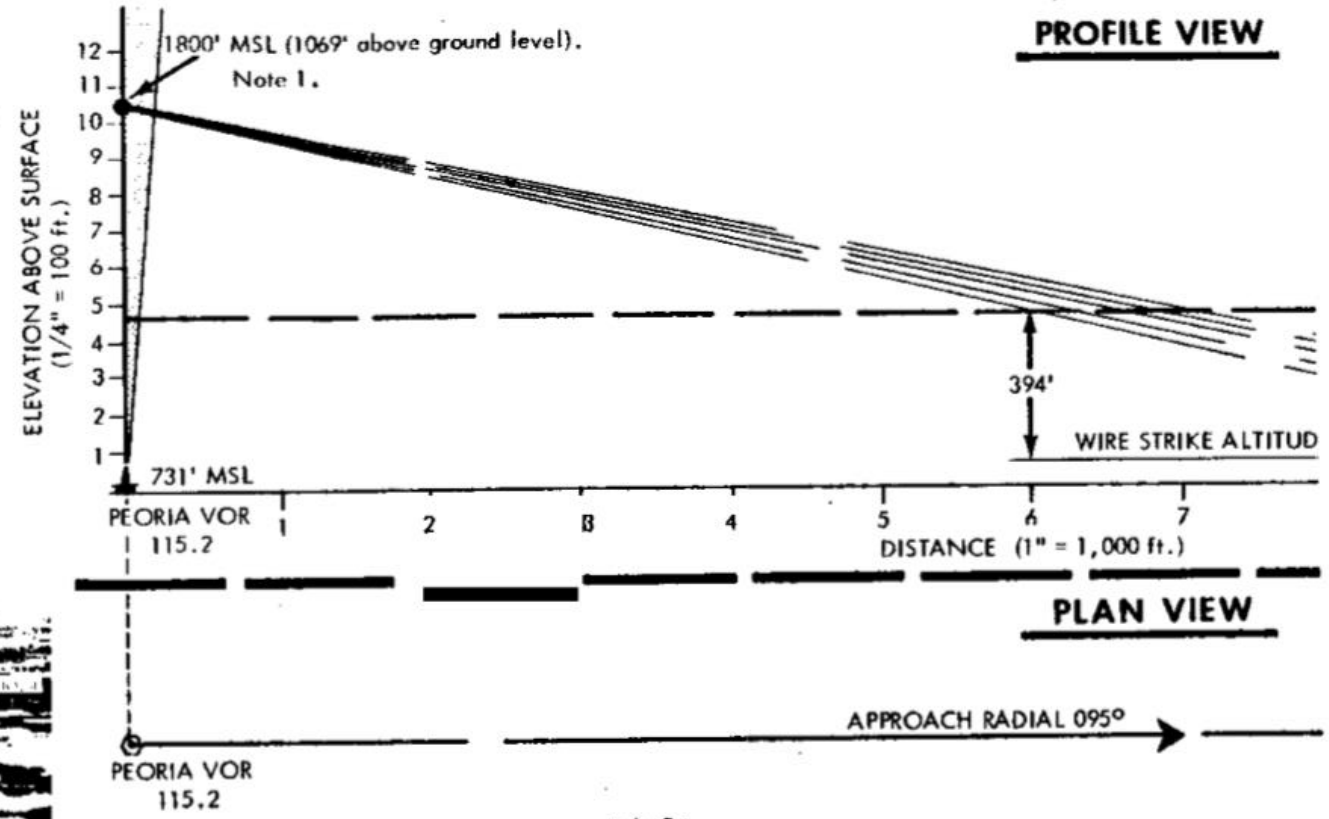
☐ **WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED**

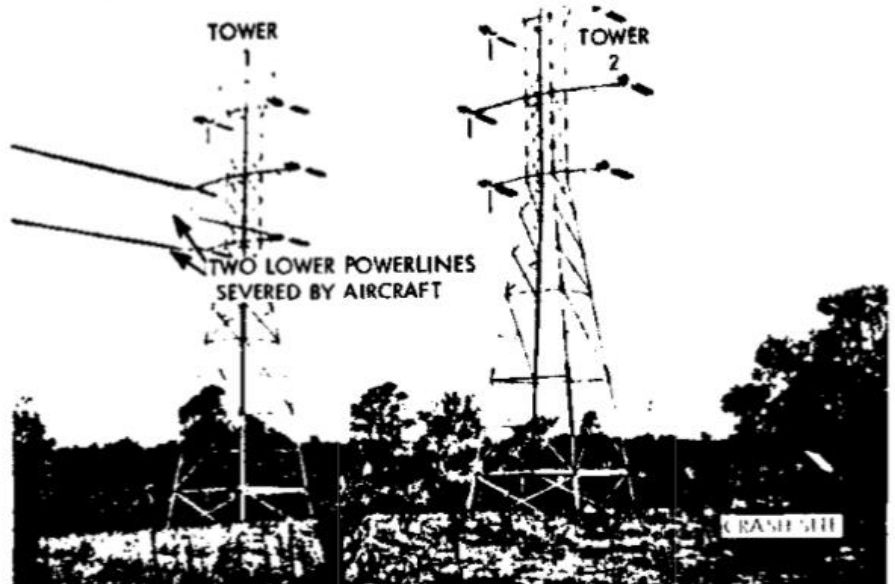
☐ **SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT**

THIS CHECKLIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.

NOTES

1. Descent profiles based on VOR departure at 1800' MSL, and a constant descent rate of approximately 1000 feet per minute. Variables of wind, speed fluctuations, or crew actions not considered.
   - A - at 140 mph. ground speed
   - B - at 135 mph. ground speed
   - C - at 130 mph. ground speed
   - D - at 125 mph. ground speed
   - E - at 120 mph. ground speed
2. Towers and photographs not to scale.
3. Power lines struck by aircraft accentuated for clarity.





NASA Conference Publication 2120

Resource Management on the Flight Deck

Proceedings of a NASA/Industry Workshop
Held at
San Francisco, California
June 26-28, 1979

March 1980

NASA
National Aeronautics and
Space Administration

1. SOCIAL AND COMMUNICATIONS
2. LEADERSHIP AND MANAGEMENT
3. PLANNING
4. PROBLEM-SOLVING
5. DECISIONMAKING

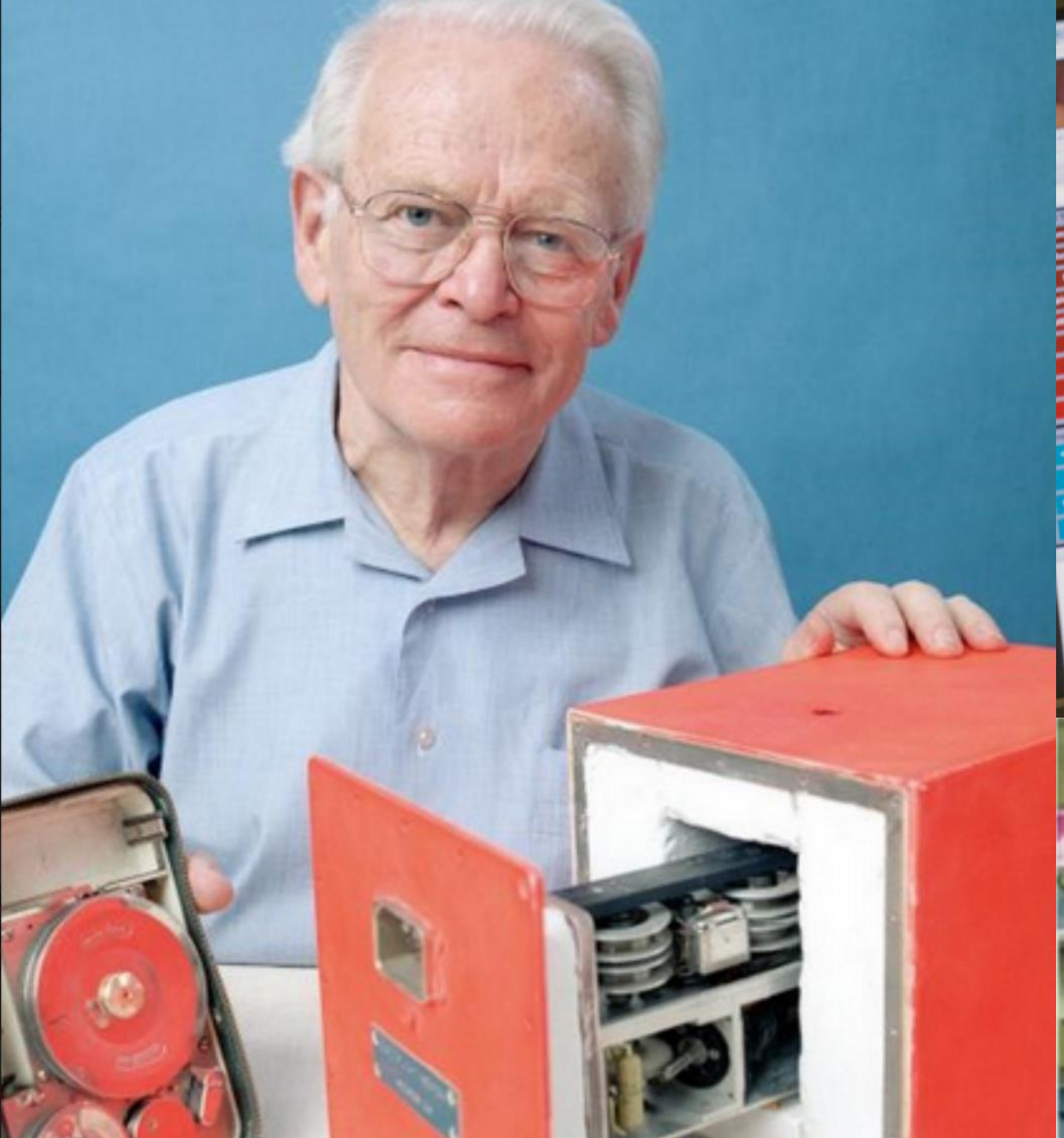
Figure 1.- Skills required for resource management.

- INTERPERSONAL RELATIONSHIPS
- MECHANICS OF COMMUNICATION

Figure 2.- Social and communications skills.

- DELEGATION OF AUTHORITY
- ESTABLISHMENT OF PRIORITIES
- ACHIEVING CREW COORDINATION AND CREW COOPERATION
- ALLOCATION OF DUTIES
- DISTRIBUTION OF WORKLOAD
- RECOGNITION OF COMPETENCY AND STRESS
- SUPERVISION OF ASSIGNED TASKS
- MONITORING
- ACCEPTANCE OF RESPONSIBILITY

Figure 3.- Management skills.




Technical Error
Technical EVENT


CAM 1
CAM 2
ANAESTHESIA
LAPAROSCOPE

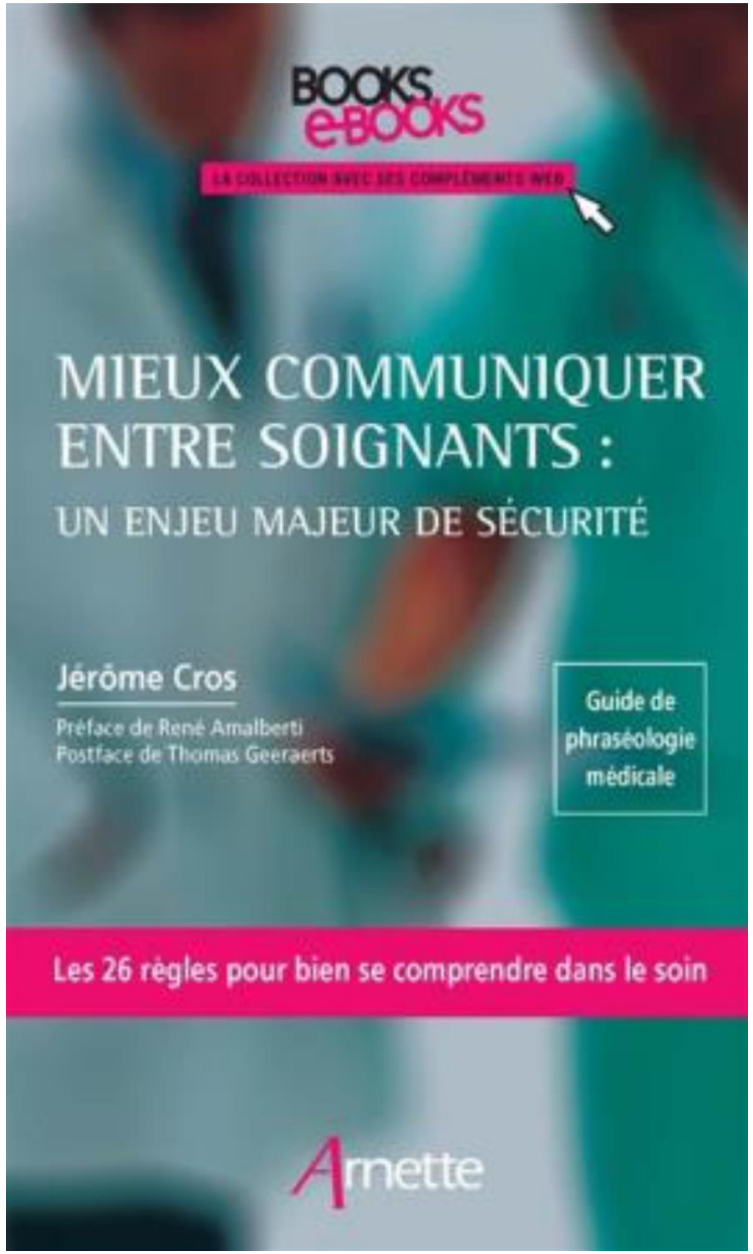
Doc 9432
AN/925

Manual of Radiotelephony

Approved by the Secretary General
and published under his authority

Fourth Edition — 2007

International Civil Aviation Organization



C’est quoi la phraséologie?

*« **Construction de phrases** ou procédé d’expression **propre** à […] une **discipline**, à un **milieu** »*

Source : Larousse

Le message

- Quantifier
- Un verbe précis
- Pas de métonymie
- Personnaliser le contact
- Passer à l’écrit si nécessaire

la précision

L’attitude

- Le bon ton
- Attirer l’attention
- Limiter le bruit de fond

l’intention

L’échange

- Fermer la boucle
- Grimper l’échelle de la précision
- Utiliser des méthodes structurées

l’esprit d’équipe

Pièges et situations difficiles

- Avouer ses ignorances
- Exprimer un désaccord
- Appliquer la communication non violente

ni hérisson, ni paillasson

L’implémentation

- Créer vos propres règles

La responsabilisation

précision
ni hérisson
ni paillasson

Rechercher

Les enfants du facteur

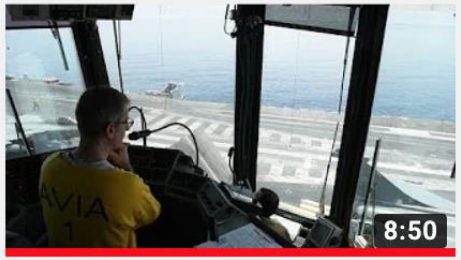
336 abonnés

ABONNÉ

ACCUEIL | VIDÉOS | PLAYLISTS | CHAÎNES | DISCUSSION | À PROPOS

Vidéos en ligne

TOUT REGARDER



La gestion du facteur humain sur un porte-avions, par le…

382 vues • il y a 1 semaine

FORDEC, par Philippe Agnès

175 vues • il y a 4 semaines

La simulation in situ, par Bruno Debien

197 vues • il y a 1 mois

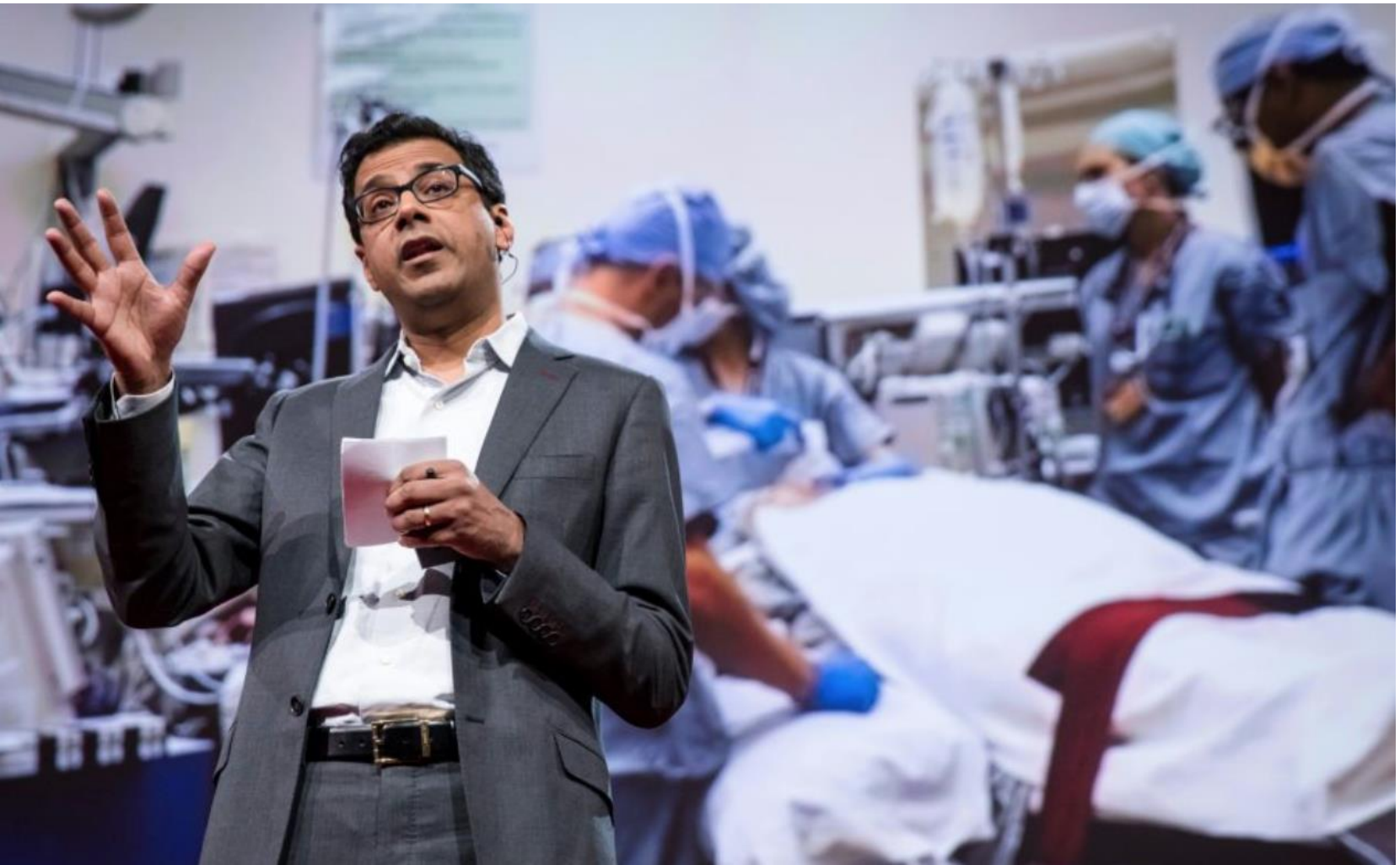
Programme du colloque - 25 octobre 2019 - au siège de l…

249 vues • il y a 1 mois

La minute du Docteur Captain, épisode 3 : la…

199 vues • il y a 1 mois

Conclusion



Humilité

Discipline

Travail d’équipe