COURS THÉORIQUE

LICENCE DE PILOTE PRIVÉ (PPL)
cellules, moteurs et systèmes

DATE 2012  AUTEUR BRICE BIERRE
Références

- Guide d’étude et de référence TP1288oF
- Entre ciel et terre
- POH et AFM
- AIM canada
More References

- Stick and Rudder
- Handling the Big Jets
- Flying High Performance Singles and Twins
Chris Brown & C-FQRV

Chris:
• Won-Del Aviation, CYHU, 1972
• Air Canada, 1973-2004
• Aeroclub de Longueuil, CYHU, 2015

C-FQRV:
• Beech Bonanza N-35, 1961
My Teachers

- Dan Chauvet
- Larry Loretto
- Mark Goodrich
- Andrew Boyd
Local pilot honored with prestigious FAA award

WATSONVILLE >> Dan Chauvet took to the air for the first time during an introductory flying lesson in 1958.

"I couldn’t believe the air up there. It felt like you could cut out a piece and hold it in your hands," he said. "I hadn’t realized how solid air was."

Solid is an excellent description of Chauvet’s half-century career as a pilot.

It was so solid, in fact, that the Federal Aviation Association awarded him the Wright Brothers Master
Larry Loretto

He’s saying, “Yeah. I just landed the world’s worst handling airplane.”
Mark Goodrich

Are we talking about flying, or what?
Stuff I’ve Learned About Learning

“Re-examine all you have been told in school or church or in any book”

“Oh, why?”

Cyrus

Walt Whitman, Leaves of Grass
Knowledge and Ignorance

Seneca the younger?
(b. 4BC)
Plan de cours

Principales composantes de l’avion
Moteurs
Carburation & injection
Systèmes
1. Cellules
1. Cellules

- Description des différentes composantes
- Types de construction
- Manipulation, précautions
Notice: weight up front, tail feathers in back, tractor propeller
Why not this?

- Stability and Control
help you the least bit in flying. While it is no doubt true, it usually merely serves to obscure to the pilot certain simpler, much more important, much more helpful facts.

Perhaps you also remember that rather highbrow concept of circulation—how (in a manner of speaking at least) the air flows around the wing, forward under the wing's bottom surface, and backward over its top surface; and how in doing so, it creates lift. Forget that, too. It, too, is no doubt true, though of course an abstraction; and it is no doubt useful knowledge for engineers. For a pilot it, too, is useless knowledge; it, too, can be actually harmful if it is allowed to obscure the simpler, more fundamental facts of flight.
Trim Tab, Servo Tab

Flettner-Klappe

- Tab “flies” larger surface
- Reduces stick force per G
Stabilator, Anti-Servo Tab

- Increases stick force per G
DESCRIPTION DES DIFFÉRENTES COMPOSANTES DE L’AVION
GROUPE MOTOPROPULSEUR
TRAIN D’ATTERRISSAGE

Train TRICYCLE
Avantage et inconvénients

Train CLASSIQUE
Avantages et inconvénients
Larry Loretto

He’s saying, “Yeah. I just landed the world’s worst handling airplane.”
Tiger Moth

Maurice Jagucki
CSB3
Handhold

- Airfields - grass
- Crosswinds?
- Ground Handlers
TYPE DE CONSTRUCTION

- Fuselage
- Ailes
- Empennage
• Poutres

• Monocoque

• Semi-monocoque
AILE

- Bois
- Métał
- Composite
EMPEENNAGE

- Plan fixe horizontal

- plan fixe vertical
EMPennage

- Différents types
2. Moteurs à pistons
2. les moteurs

- Description
- Cycles de fonctionnement
- Différents types
- Effets de l’altitude densité
- Turbo-compression
- Surpression
- Modes de refroidissement
2. les moteurs

- Allumage
- Échappement
- Commande auxiliaires
- Instruments moteur
- Limites d’utilisation
DESCRIPTION - VOCABULAIRE

Moteur
Cylindre

Figure 6-4. Main components of a spark ignition reciprocating engine.
Cycle à quatre temps
CYCLE DE FONCTIONNEMENT

Cycle à quatre temps
Cycle à quatre temps
Cycle à quatre temps
-cycle à quatre temps
Cycle à quatre temps

CYCLE DE FONCTIONNEMENT
CYCLE DE FONCTIONNEMENT

Cycle à quatre temps
Cycle à quatre temps