RECONNAISSANCE D'UNE AIRE DE POSER

PASSONS UN MOMENT SUR LE PASSAGE

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RÉPUBLIQUE FRANÇAISE

MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
ET SOLIDAIRE

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DSAC

Direction Générale de l'Aviation Civile

Ministère de la Transition écologique et solidaire

LE PASSAGE STABILISÉ

Extraits de documentations [sic]:

Les recherches de la direction du vent, de l'altitude, de la puissance, du point de poser nécessite l'exécution de passages en palier, près du sol.

Le passage stabilisé a un triple but:
- *Étudier les effets du vent*
- *Étudier le point de poser et noter son altitude*
- *Déterminer la puissance nécessaire si celle-ci est inconnue*

Mode d'évolution:
- *Choisir la hauteur pour être le plus près possible du sol*
- *Stabiliser le palier en vitesse et vario = 0 ce qui nécessite la surveillance des instruments donc l'abandon de celle des obstacles*

Après le passage, le pilote connait:
- *La puissance nécessaire (voir Manuel de l'appareil)*
- *La direction du vent*
- *La nature du sol*
- *L'altitude approximative de l'aire*

…et si on parlait un peu SGS?

LE PASSAGE STABILISÉ

FRA.5005 f) 2)
Sauf pour les besoins du décollage et de l'atterrissage, ou sauf autorisation de l'autorité compétente, aucun vol VFR n'est effectué à une hauteur inférieure à 150 m (**500 ft**) au-dessus du sol ou de l'eau ou à 150 m (500 ft) au-dessus de l'obstacle le plus élevé situé dans un rayon de 150 m (500 ft) autour de l'aéronef.

NCO.GEN.105 Pilot-in-command responsibilities and authority

(4) only commencing a flight if he/she is satisfied that all operational limitations referred to in 2.a.3 of Annex IV to Regulation (EC) No 216/2008 are complied with, as follows:

(vi) the aircraft operating limitations as specified in the aircraft flight manual (AFM) will not be exceeded at any time during the flight;

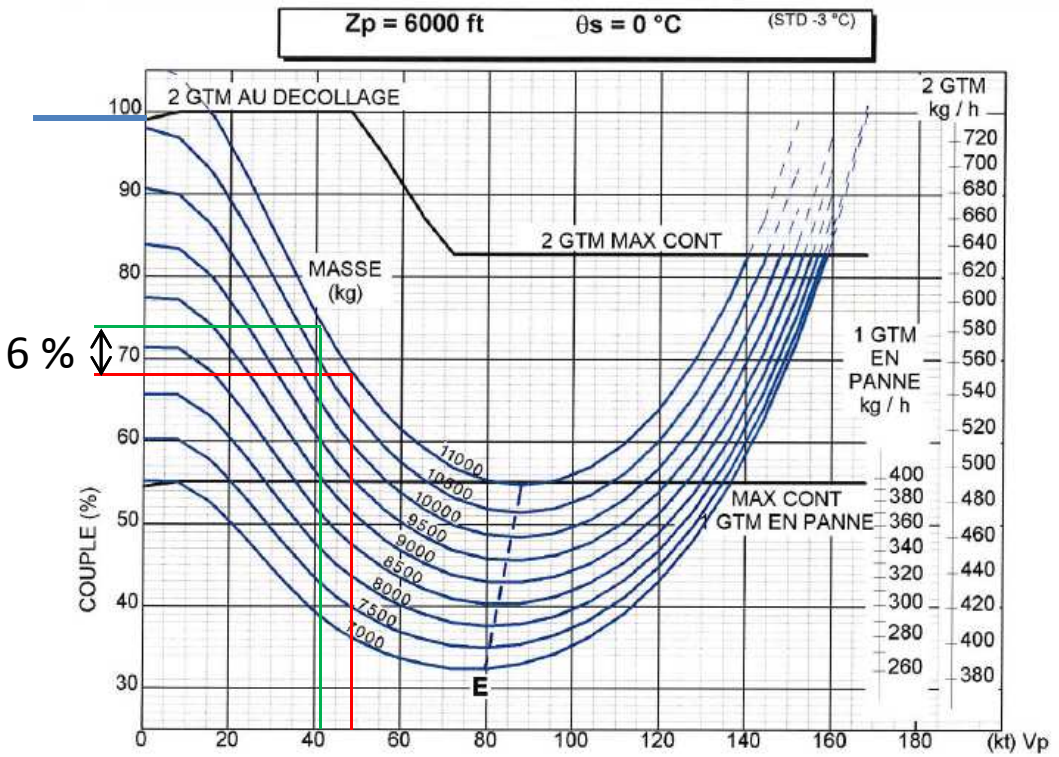
RÈGLEMENT (CE) 216/2008 DU PARLEMENT EUROPÉEN ET DU CONSEIL
du 20 février 2008
ANNEXE IV
4.c. Un vol **ne peut débuter** ou être poursuivi que si les performances prévues de l'aéronef, compte tenu de tous les facteurs qui ont une incidence significative sur son niveau de performances, permettent d'exécuter toutes les phases du vol dans les limites de distance/zone et de franchissement d'obstacles applicables pour la masse d'exploitation prévue.

Les facteurs de performance qui ont une incidence significative sur le décollage, le vol en route et l'approche/l'atterrissage sont, en particulier:
i) les procédures d'exploitation;
ii) l'altitude-pression;
iii) la température;
iv) le vent;
v) la taille, la pente et l'état de la zone de décollage/atterrissage, et
vi) l'état de la cellule, du groupe moteur ou des systèmes, compte tenu d'éventuelles détériorations.

LA PREPARATION DU VOL EN AMONT
EN TERMES DE PERFORMANCES
DOIT DEVENIR EN ANCRAGE
DANS LES ESPRITS

LE PASSAGE N'EST PAS UNE CLEF
QUI PEUT SE SUBSTITUER
À UNE PREPARATION NÉGLIGÉE

VITESSE INDIQUÉE ET PUISSANCE



T° = -3°

Vi = 45 kts

Vp = 49 kts

ERREUR SUR PW = 6 %

RAPPEL *(Vol vertical ascendant)*

$$V_z = 1{,}7.\frac{(P_N - P_D)}{M.g}$$

$$V_z = 1{,}7.\frac{(P_{HES} - P_D)}{M_{HES}.g}$$

Pour que $V_z > 0$, il suffit donc que $M < M_{HES}$

CAT.POL.H.310 Take-off

(a)(1) The take-off mass shall not exceed the maximum mass specified in the AFM for an all engines operative out of ground effect (AEO OGE) hover in still air with all engines operating at an appropriate power rating

…et les autres alors?....FAA – Transport Canada

High Reconnaissance

The purpose of conducting a high reconnaissance is to determine direction and speed of the wind, a touchdown point, suitability of the landing area, approach and departure axes, and obstacles for both the approach and departure. The pilot should also give particular consideration to forced landing areas in case of an emergency.

Altitude, airspeed, and flight pattern for a high reconnaissance are governed by wind and terrain features. It is important to strike a balance between a reconnaissance conducted too high and one too low. It should not be flown so low that a pilot must divide attention between studying the area and avoiding obstructions to flight. A high reconnaissance should be flown at an altitude of 300 to 500 feet above the surface. A general rule to follow is to ensure that sufficient altitude is available at all times to land into the wind in case of engine failure. In addition, a 45° angle of observation generally allows the best estimate of the height of barriers, the presence of obstacles, the size of the area, and the slope of the terrain. Always maintain safe altitudes and airspeeds, and keep a forced landing area within reach whenever possible.

Low Reconnaissance

A low reconnaissance is accomplished during the approach to the landing area. When flying the approach, verify what was observed in the high reconnaissance, and check for anything new that may have been missed at a higher altitude, such as wires and their supporting structures (poles, towers, etc.), slopes, and small crevices. If the pilot determines that the area chosen is safe to land in, the approach can be continued. However, the decision to land or go around must be made prior to decelerating below effective translational lift (ETL), or before descending below the barriers surrounding the confined area.

Low Reconnaissance

Discuss with the student how a low reconnaissance is performed to verify information gathered by high reconnaissance. If the information from high reconnaissance was sufficient, then low reconnaissance can be combined with the approach. Emphasize that the availability of power for approach and landing is determined during the performance planning. Stress to the student that if at any time during low reconnaissance it is determined that conditions around the landing area are unsafe, reconnaissance and/or the approach are discontinued.

DURING THE PERFORMANCE PLANNING

…et les autres alors?....EHEST

The In-Flight Power Check.

The helicopter should be flown straight and level, normally at the recommended Vy speed, ideally within 500ft AGL of the landing site, in smooth air conditions. The power required should then be noted. The collective lever can then be raised to the maximum power available (ensuring that none of the aircraft limits is exceeded) and note the power achieved. The difference between the 2 readings is the power able to be used to conduct a landing. The landing capabilities of a piston engine helicopter are typically as listed below. However they may differ for each type and should be verified before use:

<3 inches MAP available – a running landing is required.

4 inches MAP available – a zero speed may be conducted dependent on w/v and surface.

5 inches MAP available – approach to a low hover.

6 inches MAP available – HOGE may be possible.

7 inches MAP available – a vertical descent from HOGE may be possible.

MAP: Manifold pressure

…et les autres alors?....EHEST

The recce of a confined area

Fly by - If it is not possible to fly an orbital recce safely all around the LS (e.g. if the terrain on one side is unsuitable for an emergency landing) it may be possible to fly past the LS over a suitable area

Hover - As a last resort it may be possible to bring the helicopter to an 'out of ground effect' hover to recce the LS.

QUESTIONS ?