SECTION 1.10 FLIGHT PLANNING (FP)

Unit 1.10.1 AFPC: ATPL flight planning – all aircraft categories – *Reserved*

Unit 1.10.2 AFPA: ATPL flight planning – aeroplane

1. Reserved

2. Flight planning and flight monitoring

2.1 Practical considerations

2.1.1 Complete a practical flight planning exercise using specified initial conditions and operations manual data. Other conditions may be inserted or varied en route for test purposes. The exercise is intended as a consolidated test of a candidate's ability to apply flight planning, performance and navigational principles, and will include:

(a) determine take-off limits with consideration of the following as applicable:
  (i) selection of runway;
  (ii) payload/fuel uplift capability;
  (iii) MTOW, including limits imposed by cruise or landing factors;
  (iv) calculation of V-speeds and take-off distances;

(b) preparation of a weight and balance proforma:
  (i) adjustment of load/fuel if required;

(c) selection of route and altitude:
  (i) allowing for wind and temperature;
  (ii) based on (given) forecast or actual conditions:
    (A) synoptic;
    (B) SIGMET;
    (C) upper winds;
    (D) TAF/METARs;
  (iii) including departure, destination and alternate requirements;

(d) preparation of a fuel plan:
  (i) sector fuel burns;
  (ii) total fuel burn;
  (iii) alternate and reserve fuel;
  (iv) total fuel required;

(e) preparation of a navigation plan:
  (i) sector times, distances, tracks;
  (ii) headings and ground speeds;
  (iii) minimum en route altitudes;
  (iv) allowance for climb and descent;

(f) inflight computations, revisions or replanning:
  (i) fuel state, fuel requirements, fuel reserves;
  (ii) navigational progress:
    (A) tracks, ETAs, en route wind;
  (iii) diversion from track;
  (iv) change of cruising level;
  (v) engine-out flight;
  (vi) holding;
  (vii) assisting in search;

(g) interpretation of AIP maps and symbols;

(h) interpretation of (given) ATC requirements:
  (i) SID and/or STAR routings;
  (ii) DME descent steps;
(i) calculation of the following types of CP (ETP) and PNR:
  (i) normal;
  (ii) engine-out;
  (iii) depressurised.

Unit 1.10.3 AFPH: ATPL flight planning – helicopter

1. Reserved

2. Flight planning

2.1 Practical considerations

2.1.1 Complete a practical fight planning exercise using specified initial conditions and operations manual data:

(a) determine take-off limits with consideration of the following as applicable:

(i) payload/fuel uplift capability;

(ii) MTOW, including limits imposed by cruise factors;

(b) prepare a weight and balance proforma:

(i) adjustment of load/fuel it required;

(c) selection of route and altitude:

(i) allowing for wind and temperature;

(ii) based on (given) forecast or actual conditions from the following meteorological reports/forecasts with consideration of departure, destination and alternate requirements;

(iii) synoptic;

(iv) SIGMET;

(v) winds;

(vi) TAF, TTF, METARs;

(d) preparation of a fuel plan:

(i) sector fuel burns;

(ii) mid-zone weight (MZW);

(iii) total fuel burn;

(iv) alternate and reserve fuel;

(v) total fuel required;

(e) preparation of a navigation plan:

(i) sector times, distances, tracks;

(ii) headings and ground speeds;

(iii) minimum en route altitudes;

(iv) allowance for climb and descent;

(v) lowest safe altitudes;

(f) inflight computations, revisions or replanning:

(i) fuel state, fuel requirements, fuel reserves;

(ii) navigational progress, including tracks, ETAs, en route wind;

(iii) diversion from track;

(iv) change of cruising level;

(v) engine-out flight;

(g) interpretation of AIP maps and symbols;

(h) interpretation of (given) ATC requirements;

(i) SID and/or STAR routings;

(ii) DME and GNSS descent steps;

(i) calculation of the following types of CP (ETP) and PNR:

(i) normal;

(ii) engine-out.

2.2 Pre-flight considerations

2.2.1 Aircraft equipment fits.

2.2.2 General helicopter exemptions:

(a) performance of straight in approaches;

(b) turns before 500 ft after take-off;

(c) non-requirement to conduct flight control checks before take-off;

(d) refuelling requirements;

(e) crew seating requirements;

(f) hoisting, rappelling and sling loads.