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AIR NAVIGATION SERVICES

FLIGHT PLANNING

FILING OF FLIGHT PLANS FOR REMOTELY PILOTED AIRCRAFT SYSTEMS (RPAS)

INTRODUCTION

The purpose of this Aeronautical Information Circular (AIC) is to inform users and the industry of the recommendations that have been formulated by the South African Civil Aviation Authority (SACAA) in conjunction with the Air Traffic and Navigation Services Company (ATNS) in the absence of any Standard Recommendations or Procedures/ Practices (SARPS), offered by the International Civil Aviation Organisation (ICAO).

It is important to note that all RPAS Operators wishing to conduct flights inside controlled airspace must follow these procedures:

1. Complete a Flexible Use of Airspace (FUA) application form with the ATNS Central Airspace Management Unit (CAMU). This link can be found on the ATNS website. www.atns.co.za select "Flexible Use of Airspace" icon.
2. Must file a Flight Plan (FPL) with The Aeronautical Information Management Unit (AIMU) on the Internet Briefing Service – (File2Fly – <https://file2fly.atns.co.za/aes/login.jsp>). The Flight Plan must state the CAMU reference number in Field 18. The FPL may be filed up to 5 x days before the proposed flight. This link can also be accessed via the ATNS website.
3. The RPAS Pilot must discuss the intended operation (as per FPL filed) with the relevant Air Traffic Services Unit (ATSU) prior to flight. This can be done by contacting via telephone, the relevant Pool Manager, Officer in Charge, Tower Controller or Ground Controller of the relevant ATSU.
4. All RPAS Operators wishing to fly outside the ambits of Part 101 of the Civil Aviation Regulations, 2011 (e.g. requesting to fly higher than the permitted 400ft AGL in uncontrolled airspace), must complete an FUA application form with the CAMU and await authorization to do so. This authorization takes approximately 48 hours. This will be granted on submission of a valid ROC and Operations Specification (OPS SPEC), displaying approval for the requested operations.
5. All other RPAS flights operating within the ambits of Part 101, must contact either the AIMU or the CAMU – except for local RPAS flights.

With the advent of the continued development and expansion of RPAS, combined with a growing number of RPAS Operators conducting RPAS flights inside controlled airspace, and in order to standardize the filing of RPAS Flight Plans, please be advised of the following when filing an RPAS Flight Plan:

The ICAO Flight Planning formatting process will be complied with thus ensuring seamless processing and management of the FPL information. The following guidelines should be used for the filing of RPAS Flight Plans:

THE RPAS FLIGHT PLAN

- A) **FIELD 7 (AIRCRAFT IDENTIFICATION)** – insert the RPAS’s registration, e.g. ZTABC;
- B) **FIELD 8 (FLIGHT RULES)** – Insert ‘V’ for all RPAS flights which will be flown at a VFR height AGL, OR
- C) **FIELD 8 (FLIGHT RULES)** – Insert ‘I’ for all flights which will be flying Beyond Visual Line of Sight (BVLOS) or those RPAS flights which will be climbing through a Transition Altitude and thus flying at a Flight Level. All these flights (BVLOS) will be considered to be flying under IFR and will therefore select IFR Flight Levels according to the Semi-circular Rule;
- D) **TYPE OF FLIGHT** – Insert ‘X’. Follow this by inserting in Field 18 – STS/ATFMX (this will indicate it is an RPAS flight);
- E) **FIELD 9 (NUMBER)** – insert ‘01’ (or the number of RPAS’s involved);
- F) **TYPE OF AIRCRAFT** – insert ‘ZZZZ’. Follow this by inserting in Field 18 – TYP/ multi-rotor or aeroplane or helicopter;
- G) **WAKE TURBULENCE CATEGORY** – Insert ‘L’ (This means it is a light aircraft);
- H) **FIELD 10 (EQUIPMENT)** – insert a ‘V’ (VHF Radio – this is compulsory equipment in controlled airspace). Next to the ‘V’ place a ‘Z’ (GPS). Then, after the forward slash, insert your transponder equipment such as ‘N’ (nil), ‘C’ (mode C) or ‘S’ (mode S) – ‘C’ or ‘S’ are compulsory in controlled airspace, except if exemption has been obtained from the Director of Civil Aviation, the CAMU or the relevant ATSU. When specifying ‘Z’ (GPS) in this Field, follow this by inserting in Field 18, NAV/ GPS;
- I) **FIELD 13 (DEPARTURE AERODROME)** – Insert ICAO aerodrome designator. If operating from a non-ICAO designated aerodrome, insert ‘ZZZZ’. Follow this by inserting in Field 18 – e.g. DEP/Brakpan Mall XXXXS and XXXXXE (e.g.; coordinates S & E – e.g. 2503S 02659E - no seconds required);
- J) **TIME** – simply fill in your estimated time of departure (ETD) in UTC, e.g. 0730;
- K) **FIELD 15 (CRUISING SPEED)** – insert the RPAS cruising speed in knots – e.g. ‘N0025’;
- L) **LEVEL** – insert ‘VFR’ if flying ‘V’ or insert a Flight Level, e.g. ‘F090’ if flying ‘I’ and ensure this Flight Level complies with the semi-circular rule; Should you utilize ‘VFR’ in this Field, indicate in Field 18, VFR level/height/altitude – e.g. VFR/400FT AGL.
- M) **ROUTE** – the following is an example for a VFR flight conducting a film shoot over Checkers at the Brakpan Mall, e.g. ‘DCT 2503S02659E (Latitude and Longitude – no seconds required) OR define a ‘filming box’ by plotting four sets of coordinates overhead the Checkers precinct. (eg. DCT 2356S 01835E 2352S 01846E 2354S 01819E DCT. This could be a box measuring 300 square meters and will indicate that you will remain inside that box at all times.
- N) **FIELD 16 (DESTINATION AERODROME)** – Insert ICAO aerodrome designator. If operating from a non ICAO designated aerodrome, insert ‘ZZZZ’. Follow this by inserting in FIELD 18 – DEST/ BrakpanMall 2503S 02659E XXXXS and XXXXXE degrees south and east – no seconds required, (this would probably be the same point you departed from);
- O) **TOTAL EET** – simply insert the total estimated flying time of the operation, e.g. ‘0035’;
- P) **ALTERNATE AERODROME** – one can leave this box blank or if flying IFR (BVLOS) simply insert ‘EN ROUTE’;
- Q) **FIELD 18 (OTHER INFORMATION)** – this Field is used to do all the explaining of the items unexplained above, e.g. all the ZZZZ’s, the routing, etc., e.g. STS/ATFMX (space) TYP/multicopter (space) NAV/ GPS (space) DEP/Brakpan Mall xxxxx Exxxx S (space) VFR/100FT AGL (space) DEST/BrakpanMallxxxxxS xxxxE (space) OPR/RPAS FLIGHT 0725552345 (space) RMK/SARNIL;

R) **FIELD 19 ENDURANCE** – insert the RPAS flying endurance (this is usually the battery endurance).

S) **AIRCRAFT COLOUR AND MARKINGS** – self-explanatory

T) **PILOT IN COMMAND** – self-explanatory.

Flight Planning queries can be directed to: AIMU File2Fly Helpdesk – 011-928 6423

Flexible Use of Airspace (FUA) queries can be directed to CAMU – 011-928 6433.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the bottom.

DIRECTOR OF CIVIL AVIATION