



Camden Air Traffic Control

Newsletter

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Tower Contact: Through your Chief Pilot, CFI or Instructor
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Welcome to Camden from your friendly team of Air Traffic Controllers who reside in the Control Tower at the western area of the complex. We have decided to publish this newsletter as an adjunct to the other publications that allow you to safely and enjoyably fly to and from this semi-rural airport.

There are 7 Air Traffic Controllers who staff the Camden Tower on a rotating basis. We all belong to Bankstown and have our ATC licences endorsed by CASA for operational duties at both Bankstown and Camden. A shift at Camden is great for 4 of us who live locally and don't have to face the traffic hassles of the Hume Highway and M5 Motorway.

The newsletter is not to be considered as an authoritative document and in no way overrides any instruction or technique that your Instructors or flying operation dictates as an operating procedure. That gets the legal stuff out of the way.

An introduction is in order. My name is Mike O'Keeffe and I live locally in Camden. I spent 18 years in the Royal Australian Air Force as an ATC Officer. I worked at RAAF Richmond, RAAF Williamtown, Sydney Area Approach Control Centre, RAAF Darwin, RAAF Tindal, RAAF Townsville and finished my RAAF career as an Instructor at the School of Air Traffic Control at RAAF Base East Sale in Victoria. I also worked with the United Nations as an ATC Officer in the Republic of Egypt and with the United States Air Force at Clarke Airbase, Republic of the Philippines.





Since leaving the RAAF 11 years ago, I have worked at Bankstown and Camden and as an ATC Instructor on The Advanced Australian Air Traffic System (TAAATS) at Sydney Airport. I am married to a fellow Air Traffic Controller. I have a current PIFR licence and fly Cessna 172s, 182s and PA28 type aircraft on a regular basis.

To cut a long story short, I have been nominated as a liaison officer or point of contact between yourselves and the Tower team. I am not here to judge policies but if I can be of help on a formal or informal basis to Instructors or any class of pilot, I am available. I plan on presenting snippets of behind the scenes information on some of the national Air Traffic Control systems that you use regularly and may have asked yourself *'what happens to this next?'*

The NAIPS Processing Of Your Flight Plan

This edition of the newsletter will give you a broad overview of what happens to your flight plan once you hit the 'SUBMIT' button in NAIPS. *A bit of humour.* When NAIPS was being engineered way back in early 1990, it was published as having the name the 'National Airspace Integrated Processing System'. Aviation folk are always ready for a laugh and for years before its formal release and during some rather challenging engineering developments, it was slanderously referred to as '**N**ot **A**ctually **I**ntended To **P**rovide a **S**ervice' (NAIPS).

Anyway, let's run through what happens to your meticulously planned and presented NAIPS IFR flight plan with, for example, an ETD of 2300 UTC. The process is basically the same for IFR and VFR plans with some hidden behind the scenes actions that don't really affect the way you do your aviating thing.

1. When you are finished your plan, you hit ***SUBMIT***
2. The flight plan goes immediately electronically to either (or both) Flight Data Processors (FDPs) within TAAATS at the Melbourne and Brisbane Air Traffic Services' centres. An electronic clock is 'attached' to your flight plan at this point.
3. Your submitted flight plan is turned electronically into a Flight Data Record (FDR).
4. The FDR is then sent to affected Air Traffic Services agencies and appears as a printed plan on a teleprinter or as an electronic presentation on a Controller's screen.
5. Then ABSOLUTELY NOTHING HAPPENS !!!!





6. At 45 minutes before your ETD, or immediately if we are within 45 minutes of ETD now, this FDR has a vertical, horizontal and longitudinal trajectory created which allows the FDP to determine who in the ATC world needs to know about it.
7. After some seriously complex mathematics, this trajectory is submitted to all agencies that will need to know about your plan. This may be ATC Sectors (eg Sydney Radar on 124.55), ATC Towers, Flight Information Services, overseas ATC services, CENSAR and any other agency the computers determine need to know.
8. Additionally at this 'minus 45 minute' mark, a discrete SSR code is assigned to your FDR and this code is sent to affected agencies as in paragraph 4 above.
9. This FDR of yours then stays 'alive' for 23 hours if nobody actions it after which it will self-destruct with no trace.
10. At 2250 you call Camden Ground and say 'Camden Ground, ABC, an IFR Cessna 182 for Canberra, POB 3, received information Bravo, request SSR code'. Camden Tower has a printout of your FDR and SSR code allocation and so they give it to you and you diligently read it back.
11. Camden Tower then contacts Sydney Radar and coordinated your taxi and pending departure.
12. Sydney Radar then 'COORDINATES' (makes active) your FDR and another piece of magic called the Radar Data Processor (RDP) comes into play and starts looking for your SSR code within the vertical, horizontal or longitudinal trajectories.
13. After departure and at around 300 feet at Camden, the radar 'sees' your SSR code, does its big maths thing and presents you as a labelled target on the radar screen. **YOU HAVE BEEN IDENTIFIED.**
14. Immediately upon this 'coupling' of SSR code and RDP, another vertical, horizontal and longitudinal trajectory is done and all radar-derived estimates are calculated and all affected ATS agencies are updated. This takes milliseconds. If the radar determines that you are outside the tolerances of any of these planes of trajectory, all sorts of alarms and warnings happen on the Controller's screen and he/she will clarify your intentions and assist with regaining track if required. The RDP and FDP recalculate and verify all calculations every 3 seconds on climb and cruise and every 5 seconds while you are in the





cruise. Try doing that with your trusty 'prayer wheel' in cloud, in turbulence, in summer over Bindook.

All that is pretty amazing and to see it happen in real time makes you realise the talent that the engineers of this system displayed in its design. If you are interested in getting a close look at the system in the real world at Sydney, contact your Chief Pilot, CFI or Instructor and I will endeavour to organise a visit to the Sydney Terminal Control Unit (TCU) on the shores of Botany Bay.

The next newsletter will cover what happens to your flight as you cruise along on your merry way from Camden to the Birdsville races. We in our Cessna 182s don't fly high enough to remain in radar coverage or Controlled Airspace all the way to Birdsville so we'll have a look at what the system does with you on going OCTA and you are told by Air Traffic Control 'Radar Services Terminated'.

If there is anything you want information on as far as ATC goes, feel free to give me a call or email me. Don't forget however, that I will not enter any arena that contradicts the teachings of your Instructors or Operating Procedures.

Talk to you on 121.9, 120.1 or even on 281. Next newsletter will be out on 20 March.

Mike

PS What is the difference between an Airfield and an Airport?

