## **TPF and September 11<sup>th</sup>**

We as TPF programmers generally do not like security in our day to day jobs. We complain when Systems people restrict ZAFIL or we have to phone up Central Coverage to delete a bad LREC from a DB file, left over when Schedule Change went CTL-4! When British Airways introduced the SONIC "Sine-in with Confidence" package from Covia in the early 90s, let's just say it was not enthusiastically welcomed by the majority of TPF programmers, who saw it as a hindrance to doing their job. SONIC replaced the traditional BSI sine-in code with a personal SONIC code and a password, which had to be changed at regular intervals. It was hardly a revolutionary move.

In the wake of September 11<sup>th</sup>, I've been thinking again about security in the TPF world. It seems almost surreal that some of "our" carefully crafted long-term pool records were used to store PNR data containing names and contact details for fanatics whose intention was to kill thousands of others. And what did we do in the intervening time between them making their bookings and flight departure? I'm talking in terms of probabilities here as I don't know the exact details. Let's say we ran RECOUP, we chain-chased the PNR indexes, the PNRs and their forward chains. Great, everything was hanging together perfectly. Then around 24 hours before Flight departure, we passed extracts from the PNR data through to DCS where we created and updated more records of inbound connections, seat requests and so on. Yet did we ever stop to think that some of these passenger names were on FBI wanted lists? Did we ever once stop to think that there could be something unusual about these bookings amongst the many millions of bytes of PNR data we process every day? Probably not. We were pleased that DCS Autocreate worked successfully again and that we didn't get any new PNR breaks on the Phase I output. It was "Business as usual" at any good TPF/ALCS shop.

We spend a lot of time investing effort in designing TPF databases and functionality to improve Customer Service. When something goes wrong and we've accidentally cancelled a Frequent Traveller's SSR containing a Vegetarian meal request or such like, we spend more time trying to work out what went wrong and to prevent it happening again. "Something must have gone wrong at the blank CRS end", "It's probably sitting on a TTY reject queue at Airline X", "Those CTL-22s in TIIZ could be related". We see those details in pure technical terms but underneath, I like to think we always consider the feelings of the people affected. It could be our child travelling as a UM in the PNR that has failed to Reaccomodate successfully or has been hit by Pool corruption.

All this time we have been focused on Customer Service. We have never questioned the motives of the people behind the names in those PNRs. Personal freedom and democracy comes at a price. Maybe the price is that we should start to question these very motives and to build Realtime links between TPF and central crime-surveillance agencies. Build an EDIFACT link from TPF to the central FBI or INTERPOL computer? Why not? I could imagine the Swiss version of this: I'd get stopped at check-in at Zürich Airport for an unpaid tax bill! That would be a small price to pay.

One thing that puzzled me was how did the September 11<sup>th</sup> hijackers know those flights had such low passenger loads? Or rather, how come they knew there wasn't a Group booking of 50 bodybuilders or football fans? Maybe they didn't know and didn't care, or just perhaps, was somebody else using "our" TPF systems to scan passenger lists and ensure no such potential obstacles to a successful (sic) hijacking were there? If they did, was that unknown person using their own sine-code, a generic Telecom Engineers'code, or were they on a terminal, which had been left unattended? Or was there a terminal lying around accidentally left with a 06-UAT in System Control city?

Check-out the Auto-sine out parameters at your installation. If you are holding space (inventory) on a flight do you really need to wait a number of hours before forcing a sine-out? How do you know that Auto-sine out has completed successfully? Is there a report giving statistics sent to CRAS? Do you have an input message log that can be used to store and browse all messages by terminal address or variable displacement message string? I believe those are the type of questions that we should be asking in the wake of September 11<sup>th</sup>.

You probably know or may have programmed in the APIS area in DCS.

Most international carriers send APIS information from DCS on their flights to the USA. It contains full passenger name, passport number, nationality and date of birth. It is used by US Immigration to highlight potential problem cases several hours in advance of the flight touching down on US soil. It isn't perfect, but it's a start. The same basic principle of sending passenger information to the relevant authorities in advance of departure can be extended in other areas. Of course, we need what Larry Ellison has called a "single National security database" at the other end of the wires to trade messages with, but I believe that will come.

Although I reckon in 10 years time, September 11th will come to be seen as a massive intelligence failure, we can work now to improve our use of the systems and information we have available. Am I on some kind of job-creation scheme for TPF programmers? Certainly not, though this kind of work would obviously create a demand. I have a simpler request. I have PNR and DCS information in front of me everyday as part of my normal work. All I wish is we use that data to help prevent future atrocities.

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