



Confidential Human Factors Incident Reporting Programme

# FEEDBACK

DECEMBER 1992

NUMBER 28

## TEN EVENTFUL YEARS OF CHIRP

*The origins of CHIRP rest with the ASRS in the USA, and its origins stem from the investigation of a Controlled Flight Into Terrain accident in 1976. It was decided that all the people who were "wise after the event" and who had come close to doing the same thing could have sounded a warning if a reporting system for incidents, the events that do not end in an accident, had been available.*

*The decision to operate from the RAF Institute of Aviation Medicine has proved to be a wise one. The Institute has been seen as the "Honest Broker" on behalf of reporters and to have the authority of a research establishment of international standing. That is not to say that the advice that it offers is always accepted.*

*There can be little doubt that the strength of CHIRP lies in the "confidentiality" of the system. While the use of reported information is obviously a technical breach of the legal definition of confidential, the important thing is that the anonymity of every reporter is totally assured. There is simply no record of the identity of a reporter once a report is closed. It is also plain that the invitation to reporters to stand up and say "Look I've got egg on my face!" is difficult enough when the audience is*

*only their peers. If the statement were to be made available to the uninitiated, there would be a much greater reticence to make the observation. It has to be possible to make the statement without fear of ridicule or retribution. There is no doubt that in the economic climate of the aviation industry today it is even more difficult to admit a mistake, no matter how justifiable, for fear of dismissal.*

*The reports in the first year were of a very varied nature. Many were from pilots long retired who felt that others could learn from their mistakes. The reports covered much the same areas of concern as they do today: physiological; ergonomic; and psychological. Of all the problems addressed the solutions to the ergonomic problems have generated the least controversy.*

*At times there has been some feeling that the FEEDBACK magazine was being used as a mechanism to amplify a minority case, particularly where there was criticism of regulations and their application. The editorial authority of RAFIAM was challenged and had to be defended vigorously, as a principle of its operation as an entirely independent body. While these traumas do return periodically, after ten*

*years there is now more acceptance of the objectivity of FEEDBACK. It is always going to be a difficult situation for the regulatory authority to accept criticism from a body that it has helped to set up for the express purpose of being objective and informative.*

*Some of our reporters send us a statement that could be regarded as a matter of opinion, rather than a statement of fact. Opinion is extremely valuable as background information. However, to get any action, to eliminate a problem that you feel might put the aircraft at risk, a report has to contain information about a specific incident. The event may be quite innocuous in the circumstances in which it occurred but you may be able to see that in other combinations of circumstances the same event could trigger disaster. We do recognise that sometimes there is only the feeling of "the hair on the back of your neck bristling" that warns you of a problem developing; so, tell us about those occasions as well.*

*Another difficulty with some reports is that they sometimes contain reference to a previously submitted MOR. Clearly if CHIRP approaches the CAA with such a report and quotes the MOR then any semblance of anonymity is immediately destroyed. Please do continue to send us the report because it will add weight to the push for action. Even if we have to sacrifice valuable information the anonymity of reporters will be preserved*

*A quotation from an early assessment of the effectiveness of CHIRP is still as valid today: "Gauging the success of such a scheme is, in any case, difficult, since it is not obvious what the criterion of success should be. One never knows about the accident prevented, but CHIRP has undoubtedly acted as a catalyst for a number of changes that are of clear safety benefit. Even if this were not so, and even if no reports had ever been submitted to CHIRP, the system would still be required. It is a manifestation of the principle that, in aviation, safety is an issue superordinate to any considerations of*

commercial gain, industrial politics, or disciplinary action; pilots and controllers must be given a means to voice their anxieties about safety freely and without fear of retribution."

*After ten years of ASRS Bill Reynard, the Director, wrote a report of the operation that reflects the situation at CHIRP today. In his summary was the quotation: "When you want to know more about an occurrence, or why a person did what they did in the course of events, the best approach seems to be to simply ask the participants. First-hand experiential input is not a foolproof method of data acquisition. It is subject to the biases and fears of the reporter; but it is usually better than interrogation of witnesses and non-participants, or second-guessing. It is our experience that the voluntary, confidential, non-punitive incident reporting system is a logical and effective means of acquiring unique data, as well as supplementing data generated by conventional accident investigation techniques and other system monitoring programs. A properly-structured incident reporting system's great advantage is that it has the strength and means to ask, and frequently answer, the question "why?" whenever one is confronted with a "what". There is no substitute for knowing why a system failed or a human erred. If we understand why things happen, we may be able to prevent them from happening again or at least protect the participants, or the system, from the consequences of subsequent events. The potential for constructive uses of incident data seems to be especially promising in the field of human behaviour; incident reporting is a tool which permits the cooperative examination of human behaviour in complex systems, using data supplied directly by the participants in that system. ...."*

## HELPFUL HINT

Ref Chirps/Feedback June 92, "MAN/MACHINE INTERFACE", can I suggest (as a B747 Line Training Capt) that whenever selecting from INS NAV to heading

ALWAYS press the TRK CHANGE button, you will bring on a light you do not normally see and arming the INS for your next command after finishing in "hdg select". This works with Litton or Delco INS, you get a "warning" light of sorts (that you are out of INS) and you can get one step ahead by presetting your next INS command ready to action by pressing insert.

It may not be SOP but as an attention getter it works!

## CHANGE OF STYLE

*The following reports show how communications in the cockpit have improved with wider discussion of CRM, although these examples may simply show a difference between the personalities involved. Certainly, many more of the first hundred reports related to issues covered by CRM than in the last hundred reports. The first report is taken from CHIRP's first hundred reports and the second was made much more recently.*

## CAPTAIN SILENT

P1 handling passing 3000' QNH. Loud report from rear accompanied by mod-severe airframe vibration. No 2 eng TGT rising rapidly, hp rpm erratic.

P2 asks P1 if he would like eng failure drill on No 2. No response. After repeated requests, P2 announced "commencing eng fail drill No 2". Drill completed.

P1 turns ac to downwind (09), tells ATC we are turning back due to an emergency and intention to complete vis approach and landing 09.

P2 completes shut down drill from C/L and after T/O checks. All handling and flap selections made by P1.

No discourse between pilots. P1 talks to pax.

P2 reads approach C/L (unprompted) P1 has bugged 45 degree flap VAT on ASI. P2 draws

attention to requirement for 26 degree flap approach on leg. P1 takes no action. Several reminders by P2. P1 changes to 26 degrees speed on ASI.

Long downwind airfield not visible due a.m. haze into sun. Turn base. P2 selects ILS (unprompted, as vis approach not possible) and informs P1. Manually flown onto ILS. Speed 210 kts. P2 recommends speed reduction, flaps 18 and u/c down. 1500' QFE 6 miles to T/D.

After several reminders of speed/configuration 18 flap selected. After several reminders of requirement for u/c, u/c selected (700 QFE) speed 180 kts. 600 QFE on G/P. Several requests for 26 flap and speed reduction.

No action by P1. P2 considers taking over. P1 strong character and has not responded to any requests nor initiated any drills since eng failed. P2 decides for time being to remain P2.

More requests for 26 flap from P2 (now concerned that impending GPWS will be ignored by P1 due knowledge of P1 reaction to lapse in past!) P2 trips GPWS CB requests 26 flap.

26 flap called for by P1 at 300 QFE. P1 lands ac (extremely good touch down) P2 selects emergency reverse (unbriefed by P1). Ac slows and taxies in without further incident.

All drills, checks ILS selection etc, initiated by P2 unprompted. No two-way discourse throughout incident.

## CAPTAIN SPEAKING

Several consecutive days using the same runway with strongish winds. First two days, tried coupled approaches, but autopilot made heavy weather of tracking localiser, tending to drift off centreline.

Third day, this autopilot turned onto localiser nicely, started down the glide, I decided to go

manual, took remaining flap, saw runway ahead and slightly to the left in slightly hazy conditions. ASSUMED I was to the usual side of the centreline again, and turned left onto centreline.

At about 900ft, a voice from the left seat says "You are going for the right-hand runway aren't you?".

Only then did I see the runway over to my right. A quick wind assisted jink to the right for a normal landing.

The taxiway is blacker and more prominent than the runway, whose approach lights were either off or at low intensity. This was also the third early AM flight in a row - all from hotel accommodation - so not much sleep I'm afraid.

It is extraordinary how you can make yourself see what you want to see, and ignore the evidence of your instruments. Even with total flying hours approaching 5 figures, you can never be too experienced to make daft mistakes!

## ATC REPORTS SUMMARY

*Since 1986, there have been reports on a number of issues that are still providing controllers with problems, even though there has been a change of emphasis.*

*CRATCOH does not seem to have solved the problems of work patterns affected by staff shortages and rest periods.*

.....Now the unit I work at has been working the NEW HRS LTD roster for some time so I thought I would like to comment on it. When it was being discussed it all sounded like a perfect solution to working practices. The reality is somewhat different our day shifts have been increased in length and we are now working every available second of that shift, after two days of DAYS I'm too tired to think let alone

work safely.

Days off have also been affected going from blocks of 4 days off to more frequently spaced blocks of 2 days off, which gives us just 56 hours off after working maximum hours before starting all over again.

What in theory seemed like a good idea in limiting our hours has left me constantly tired and I've no doubt has an effect on my work.

*Phraseology and callsign confusion still provide as much interest as in the past.*

....I can fully concur with the ATC reports made on callsign confusion in FEEDBACK 27, though I have little to offer in the way of a useful solution. For myself, all I feel is that we (at both ends of the R/T) just have to be more disciplined whenever we transmit, and use the full callsign (company designator as well as flight numbers) at all times. There seems to be an increasing tendency for people, and controllers are as bad as the pilots these days, to reduce the callsigns to mere numbers. It seems more so when it is busy and the R/T workload is high and R/T space is limited; this is just when the risk of confusion is also at its greatest. We must guard against such sloppiness. There is no abbreviated callsign for a company designator and flight number.

*One area where there seems to have been some improvement is better equipment which is now becoming available.*

.....However onto the subject that has sparked me into writing; the "CONFUCIAN COMMUNICATION" piece (FEEDBACK #27). The incident concerned certainly sounded like every Tower controller's nightmare, and images of Tenerife spring to mind yet again. However, since I work at an airfield fortunate enough to have a Ground Movement Radar (of sorts anyway!) I have to say that it is not uncommon to receive pilot reports of "Runway clear" when it is anything but! There seem to be many pilots reporting clear as the flight deck rolls past the edge of the runway on to a fast

turn off, completely ignoring the remaining 200ft of "jumbo" that is following! This is all very well when the weather is good and we can see what is going on; but at many airfields it doesn't even have to be foggy for the Tower to lose sight of the extremities of the airport. At my own, a cloud base of 300ft or less means being unable to see the far end of the runway, and visibilities of 3000m or less is the same. At airfields with no Ground Radar, the Tower controller must take the pilot's "Runway clear" report at face value, and can therefore clear the next aircraft to land or take off. Of course any doubt at all, and the controller should clarify, but from the pilot's side, please make sure you really mean Runway Clear, when you say it, even if it means just rolling a few extra feet past the Holding point, or even onto a taxiway. Better safe .....

Meanwhile, here is also hoping that the regulatory bodies that decide quality of the equipments controllers have at airfields, give Ground Movement Radar a high priority. The recent disasters in the US have certainly made me sit up and keep a closer eye on my runway!

*CHIRP has managed to assist in bringing CCTV to one tower, improving software on some new consoles, and restricting flying where the controller ability was temporarily degraded.*

## **FLEXIBILITY REQUIRES DEXTERITY**

*This next report is an example of the problems which have been recognised by a number of surveys made into the effects of the "Glass Cockpit" on pilot performance.*

This report is furnished to prove basic navigation can escape those in "GLASS" aircraft, and perhaps a lack of training in the skills of computer management.

The 737-400 which departed ahead of us accepted a SID, and routing, that was at variance with what was programmed into his FMC. We listened to his clearance, because he was probably using the same route as we were, and would obviously try for "our" Flight Level. When he got his routing it meant he diverged from the standard route, so we thought, "terrific, we will get our optimum level". When he started going the normal route ATC asked him where he was going - they replied, "our computer is telling us the standard route.". ATC told them to, "go direct to the VOR". They said, "Roger, proceed to the VOR".

There was about a 30 second break in transmissions when they then asked, "can you give us a steer to the VOR?". ATC obliged. Then they asked for the frequency of the VOR. ATC was a bit slow, so I told them, "VOR frequency and ident.". They said thanks and obviously went towards the VOR.

ATC later allowed them to proceed to an en route reporting point which blocked our climb. I don't want to deride my fellow aviators, but I want to show that even a 737-400 must ask for a "steer" and VOR frequ - all of which should be in the aircraft's nav. data base; and any direct routing/amended routing should be no problem to the computer "ace". I fully sympathised with the guys - I could picture the scene.

## **TRAP FOR YOUNG PLAYERS**

*ETOPS has given a long range capability to crews who are mainly used to operating in a comparatively close and familiar geographical environment. Confusion about what form the information on altimeter pressure settings take as a datum is not the only source of error which can creep up on even the most aware and well briefed. The pressures of New York can provide many opportunities for misunderstandings and this report shows the effect of "spoonerisms" in these circumstances.*

VOR approach to JFK runway 22 left in good VMC. First Officer flying - me performing co-pilot duties. First Officer experienced, but not very long with company. He asked me to tune 22L ILS as back-up. This I did, but was suspicious when received signals on 110.9. Checked ident and it was ILS for 13L (use same frequency) - good airmanship by First Officer (to use all available aids) but could have led him into a trap - suggest a note of warning somewhere would not go amiss.

VOR approach to 22L is offset - QDM is 223 degrees M for runway, final approach course is 232 degrees M for approach. (Numbers easily spoonerised in the mind, to expect to be lined up on runway.) I had pointed this out in the briefing, but easily overlooked.

Final approach: the usual New York rush of radio calls while doing checks, running flap, calling heights against DME, operating flight director, etcetera. Somewhere around the 1000ft mark I noticed we were going through the centre line of 22L, heading for 22R. I called clearly "the runway is over there" pointing to the left, and the First Officer acknowledged and lined us up on 22L. After landing he admitted he was in fact going for 22R, not having seen 22L. Quite understandable, as the approach points you at the threshold of 22R. We had long before been cleared to land by Tower; 22R was being used for take-off (although NOTAMmed as closed - more confusion!).

I am sure this is not the first or the last time that such a mistake will be made; it is almost "designed in". If we must live with these dreadful noise-abatement offset approaches, surely very obvious and bold notes to that effect on the let-down plates should be printed in the very least?

## ANOTHER TRAP

Please find enclosed copies of AERAD Charts for Tenerife. The area chart shows the airway safe altitude of FL130 between TFN and TFS,

and an MSA of 145 just 5 miles west of track. The AERAD safe clearance criteria states that the FL130 figure gives 2000ft clearance from obstacles within 30miles either side of track. (See Legend booklet p20).

Mount Teide on Tenerife is 3707m high = 12,150ft and hence at FL130 a clearance of only 850ft is allowed. This would become zero clearance with a QNH of 981.

So really AERAD is acting in an irresponsible manner by NOT stating that the MSAs shown do not comply with their own stated criteria as per the Legend booklet. At least a note to the effect that reduced clearance is given, should be added to the charts.

*Within the legend of the documentation is given the way in which the general calculation of safety heights or Minimum Safe Altitudes are calculated. There may be variation from this set of criteria and either the National Criteria or the ICAO criteria can be used to provide the information, but there may be no specific note given to highlight this fact. This is the case in the Tenerife area and there is a note on the STAR chart to specify that the State criteria are used. This is not the only place in the world where these apparent anomalies can be found so, if you have never been there before, read the small print in the documentation!*

## WHY CONFIDENTIAL?

*Think about the following fundamental truths of a reporting system:*

*\* after an accident there are always incidents brought to light which could have pointed to the accident, had the information been correlated effectively*

*\* the majority of accidents which have occurred in the recent past have a root cause in human factors errors, the culmination of which ends up in the domain of the pilot*

*\* if we can collect the data on the incidents currently occurring then we can possibly predict the form of the future accident. Having identified a causal chain the weakest link, and thus the easiest to remedy, can be identified and the chain broken*

*\* Finally, truth is modified by perspective and not an intrinsic value. Two individuals can describe the same event in total honesty from their recall of their particular perception and the two descriptions can appear to describe two different events.*

*There is a human trait in us all which makes us reluctant to admit to an error. The rationalising of an event to make it fit a more acceptable pattern happens without our making any specific attempt to change the facts. There may be some partly conscious embellishment when recounting an event to one's peers, especially in an atmosphere where companions are comparing similar experiences. However, it is the perception of an individual of a particular situation surrounding an event that determines his response and thus the correctness or error of the actions taken. It is natural to feel that admitting an error will result in, at the very least, ridicule by one's peers and at the worst the ultimate retribution of loss of livelihood. It has taken decades to convince aviators that they all fail to get into the superhuman category and suffer from the same limitations, to a greater or lesser degree, as the rest of mankind. Even in the 90s the confusion about Human Factors Limitations is still equated by some quaint old aviators with LMF, the wartime category of Lack of Moral Fibre given to those who un-volunteered themselves from flying duties after a period of combat flying.*

*With this background it is not surprising that there is some reluctance to "stick one's head up over the parapet" and make a report of an error. It follows that those who do report must feel very strongly that there is a problem to be solved. This is the factor that adds credibility to the report. It is therefore essential that the reporter is identified and can be contacted,*

*not only to clarify the events in some cases but also to assure that the cloak of anonymity is not being abused. When a report is closed the anonymity is total, but only after the reporter has completed his contribution to the system. A consensus view of an event is not as useful as a personal perception of an error. It is essential that the FEEDBACK magazine does publish to all involved the latest problems that their peers are experiencing, in order to make the problem one which is shared and thus reported when it happens again. These are the reasons for the "Confidentiality" of the system; to ensure that reporters are comfortable with the assurance that there can be no ridicule of the individual and no retribution.*

## PHANTOM ROLL?

For operational reasons I periodically need to operate at night into an uncontrolled unlit island strip. (We used to use hurricane lamps for lighting but lately I have found that little piles of copra give a good light, and further - stay on in rain and wind which knocks out the lamps.) I am the only pilot available so I usually make the approach to the island (over 100NM south of the international airport) on autopilot while I look out for the island/runway, as I am aware of potential disorientation going back and forth on instruments.

At 12NM out I was level at 800ft unfortunately still in cloud and rain. At 08NM I was expecting to see some lights but did not. (The wind was strong and this usually kicks the cloud base up to 1200-1500 feet.)

As I looked back at the instruments I felt disorientation coming on. (I think I was URGENTLY looking for visual clues that weren't there and my brain was making the best of a bad job.)

I was straight and level, altitude locked, on the autopilot. I felt I was in a 20/30 degree turn to the right. I REALLY made a big effort to relax - kept my body loose and tried to steady myself down. It feels pretty lonely in rain in an isolated

situation like that and I really kept myself in check. The more I tried to relax and re-orientate the worse the situation became until I felt I was in a 90 degree turn right. (This in rain over the sea.) Thank goodness I had seen that old USAF/RAF film (I'm ex-RAF) when the Phantom pilot lost it, and it was recommended he should have stayed on autopilot. I know it sounds silly but I felt I was letting myself down not taking manual control. (Please give your view of this point.) I really couldn't shake this 90 degree turn feeling although I checked all the flight instruments carefully and as my altitude was constant, and that the AH was steady, and particularly the compass was not turning I decided I must be straight and level. I was surprised that I couldn't re-orientate - I really was relaxed. I had made up my mind to keep everything as it was and apply power to build up speed to slowly climb out of all this when I saw a couple of lights on the ground which I recognised as the settlement. I was able to take manual control and land with no problems on a difficult rainy, crosswind night. I really don't know what to make of this. I have been flying for 28 years and I've never experienced anything so permanently severely disorientating.

*While this chap was looking out into the blackness he was getting no visual input, in which case the mind begins to make use of whatever information is the next best available. Almost everyone has some slight asymmetry between the balance organs on the left and right side and normally this is not significant as there are other inputs that override or reset the data. However, it was when he was compelled to use this asymmetric input that the disorientation began. He made absolutely the correct decision to concentrate on the instruments and let the autopilot fly the aircraft. It was fortunate that he was straight and level, at a constant height, and could then leave everything as it was. It is typical of this sort of problem that as soon as there was a visual cue available the disorientation was immediately shaken off.*

## IS THERE REALLY A MARGIN?

*There have been, over the years, reports which show that there are some crews who are using the amount of performance increment (provided by the factors applied to gross performance figures) which give the scheduled aircraft performance tables, in order to take more fuel than is prudent. These are two of the most recent reports:*

Operating with a senior captain - personally not impressed - arrogant and irritable individual, (a universal opinion).

R/W is limited but I planned for this R/W as the other R/W had tailwind, but did allow us to return to Base non-stop (just). I am P1 for this sector, and Capt puts on more extra fuel than I had planned for. By getting a/c back on schedule he "pleases" the company. As the F/O I was put in a terrible situation. We took off with an excessive tailwind OVERWEIGHT - I questioned his choice of R/W and totally unprofessional behaviour - I was not asked to offer my opinion. As first officer I was intimidated into going along. When airborne, in order for T/O to meet performance required, suitable weather conditions were recorded.

I was for the first time in my flying career frightened of the consequences on a failure on T/O.

-----

Even after Captain had "fixed" the performance to take off in +30 degrees C - it was touch and go all the way as to whether we could make destination. Approaching the destination we were EVIDENTLY short of requirement. The fuel on board figures on the final check were entered to read as if we were on limits.

He suggested that it was close and bemoaned that a diversion would be inconvenient for the Company and ourselves and passengers - I agreed - but left him with the decision he was

the Captain. I have no wish to hold up the operation but limits are for good reason - a bit of "creative accounting with fuel" is OK by me - but not when it is unsafe. We landed BELOW minimums but the recorded fuel figures on arrival hid this discrepancy - I just couldn't believe it, all for a diversion and disrupting the plans of the Ops Dept!!!

*These were "glass cockpit" aircraft and the figures used had been extracted from the FMC. CHIRP investigated the source of such data in the FMS and it may surprise some of those using this method that not all aircraft use the figures which you would expect from schedules using the standard CAA Performance "A" factors. You can only be sure of safe performance, as defined for your aircraft, if you use the ambient figures and even then there may not be as much margin for error as you think!*

## **MORE OF LESS FUEL**

On my particular aircraft, there is an operations manual limitation of operating the hydraulic pumps on the ground with less than 800kgs in one wing tank, hence implying that you should be on stand with 800 a side, and hence touch-down with 1600kgs plus a taxi allowance for coming onto stand. Working backwards from the alternate; adding the burn to alternate, to this fuel figure for landing at the alternate, would give the minimum figure for diverting from the destination. THEN add any fuel which could be used for holding, if required. If you do not wish to add any, then don't, it just means that when you are down to your diversion figure then you divert straight away.

This approach to fuel planning seems much more logical to me. I cannot understand why the CAA has not picked this up by now. I can see that the airlines would object on the grounds that we would generally land most of the time with far more fuel than we do now, and

hence have increased costs of carrying around more fuel than is necessary, until of course you actually need it!

## **MORE MODIFIED MET**

*Not all the modifications made to met readings come from the cockpit.*

On leaving the mainland the met report from our offshore destination was 2-2.5 miles vis and 8/300-400.

On talking to rig to get an update on the weather I was informed that the vis was now 0.5 nm. On suggesting that our minimum range is 0.75nm and that we turn around and go back to base the visibility "magically" increased to 2nm. After carrying out our approach and going around I determined that the vis was no more than 0.5nm. Could this be a case of the met observer offshore "fiddling" the weather to get the crew change done at any cost?

## **DO PEOPLE COST MORE THAN ACCIDENTS?**

*There have been several reports lately which all give the same picture of the aviation scene. The financial situation of many companies is so precarious that they are reducing the numbers of staff to the very minimum that they can use to cover the work. There are some who are stretching the interpretation of the relevant regulations to extremes. CHIRP has gathered together related reports and is in the process of making a consolidated case for investigation by the regulatory authority. With deregulation in Europe in the near future the problems epitomised by these examples are not going to improve unless firm action is taken by the responsible authorities. The purpose of CHIRP has been stated as a programme to discover dangerous trends in aviation which could be expected to degrade*

*safety or result in an accident. To bring this out into the open certainly seems to be a valid exercise to enable these issues to be addressed.*

*Here are two reports which provide examples of this type of problem.*

*First, the Pilots who face the extensions to the 5 consecutive night duties under the threat of dismissal:*

After several weeks of rosters of five consecutive nights I informed ops that I would not be doing the fifth night due to extreme fatigue.

On the 4th night whilst en route I was told to change frequency and although I wrote the frequency down I didn't select it. I found this out at the next reporting point when I asked for a direct routing.

Letting down, me PNF, Wx good. PF calls for both on the ILS. I selected both VORs to the ILS but failed to change the DME. The PF had a lot of problems assessing speed relative to distance to go.

At 500ft on the altimeters things looked wrong and I realised we both had QNH selected.

At this stage full flap was called for. I selected it and the PF said "Sorry, that was a little fast".

Colleagues subsequently went on to complete the 5th night but one of them had been told "There are 10 pilots waiting for your job".

*Second, the Air Traffic Controller's problems:* I failed to select the PAPIs for the appropriate rwy in sufficient time to be used by an inbound light aircraft. After the aircraft had landed, I apologised to the pilot for the lack of PAPIs. The pilot intimated however that there was no problem.

The purpose of this report is to state that having been on duty 5.5hrs+ without any break, I was more interested in bladder control than the air traffic variety; my concentration to duty had lapsed.

All rwys had been in use that afternoon. The regular flow of traffic during my watch did not permit any breaks on an opportunity basis. To try and enforce the Aerodrome's Flying Restriction - PPR, would increase the workload and make the situation worse.

Other ATC units seem to be able to follow CAP573 when there is a shortage of ATCOs.

*ATTACHED TO REPORT:*

NOTAM ITEM "...Due staff sickness radar not available ATC service may be interrupted to facilitate fatigue breaks."

**Please note that there is now a direct phone line to CHIRP:**

**0252 372509**

**as well as the existing number(0252 24461 Ext. 4375).**

**The RAFIAM facsimile number is: 0252 377839**

We wish you a

**MERRY CHRISTMAS  
AND  
A HAPPY NEW YEAR**

# GUARANTEE

NO RECORD OF YOUR NAME AND ADDRESS WILL BE KEPT

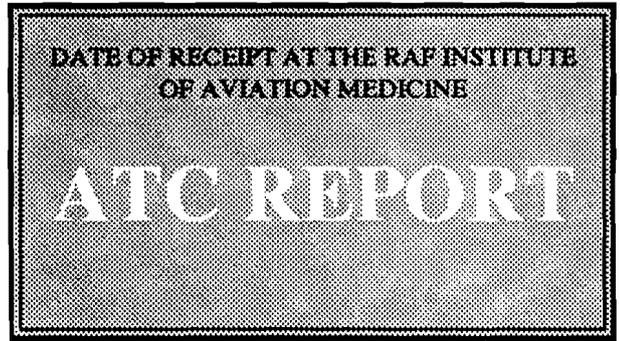
NAME: -----

ADDRESS: -----

-----

-----

PHONE No: -----



We ask that you give your identity only to enable us to contact you if we are not clear about any part of your account. In any event this part of the form will be returned to you, as soon as possible, to confirm that we have received your report.

YOURSELF	THE INCIDENT	
HOW LONG AN ATCO:	DATE:	ATC SERVICE(S) BEING PROVIDED:
HOW LONG AT PRESENT UNIT:	TIME:	IN WHAT TYPE(S) OF AIRSPACE:
ON DUTY AS:	LOCATION & NEAREST REPORTING POINT:	USING WHAT TYPE(S) OF RADAR:
HOW LONG VALIDATED ON THIS POSITION:	TYPE(S) OF AIRCRAFT INVOLVED:	WEATHER:
	AIRCRAFT IFR OR VFR:	

Please use this space to write your account, using extra paper if you need to.

SEND TO: CHIRP (CONFIDENTIAL REPORTS), FREEPOST, RAF IAM, FARNBOROUGH, HANTS, GU14 6BR

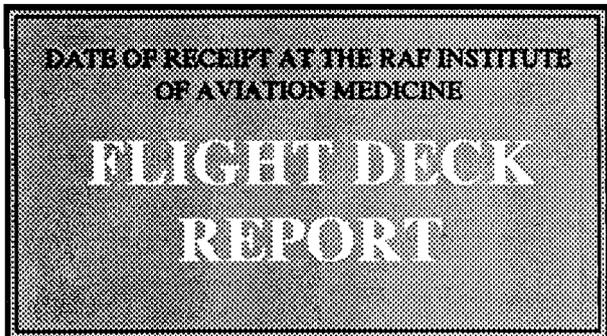
YOU CAN ALSO OBTAIN MORE DETAILS BY TELEPHONING ALDERSHOT (0252) 24461 Ext. 4375 OR DIRECT LINE (0252) 372509

**IMPORTANT** Please notify us when you change address.

# GUARANTEE

NO RECORD OF YOUR NAME AND ADDRESS WILL BE KEPT

NAME: -----  
ADDRESS: -----  
-----  
-----  
PHONE No: -----



We ask that you give your identity only to enable us to contact you if we are not clear about any part of your account. In any event this part of the form will be returned to you, as soon as possible, to confirm that we have received your report.

YOURSELF	THE FLIGHT	THE INCIDENT
CREW POSITION:	DATE:	TIME (LOCAL/GMT):
TOTAL FLYING HOURS:	FROM:	DAY/NIGHT:
HOURS ON TYPE:	TO:	LOCATION:
<b>THE AIRCRAFT</b>	IFR/VFR:	PHASE OF FLIGHT:
TYPE:	TYPE OF OPERATION:	WEATHER (IMC/VMC):
No OF CREW:		

Please use this space to write your account, using extra paper if you need to.

SEND TO: CHIRP (CONFIDENTIAL REPORTS), FREEPOST, RAF IAM, FARNBOROUGH, HANTS, GU14 6BR  
YOU CAN ALSO OBTAIN MORE DETAILS BY TELEPHONING ALDERSHOT (0252) 24461 Ext. 4375 OR DIRECT LINE (0252) 372509

**IMPORTANT** Please notify us when you change address.