BIRD STRIKE COMMITTEE EUROPE
Study group "Communications"
Copenhagen 26th to 30th of may 1986

Communications TO and FROM the Pilot

by Captain D. RENOUX Air Inter France

"Communication" is the exchange of informations.
Concerning bird hazard in aviation, these informations can be written on paper or... radio waves. In both cases, pilots send or recieve them.

I. INFORMATIONS WRITTEN ON PAPER FROM THE PILOT.

They are mainly plane versus bird collision reports. This form should be filled after each collision. Alas, despite an inprouvement during the last few years, in relation with a pilot's greater concern, all the collisions with birds are not yet reported.

This concern should be enhanced in pilots training schools by lessons dealing with bird hazard in aviation, in Companies by lectures while annual refreshing courses and everywhere by papers about what is going on the subject, issued by State Aviation Departments.

The collision reports filled by pilots enable Official Services to conduct statistic studies leading to better knowledge of the risk, then to the settlement of devices to fight the risk, and finally to appreciate the effectiveness of these devices.

Thus, we see the importance of better reports. Airport Authorities cannot set up anti-bird equipment if they are not aware of most actual collisions.

But, would 100% of collisions be reported, the printed form only deals with actual collisions and neither with dangerous gathering of birds without accident, nor with avoided collisions by luck, chance, crew or bird manoeuvre.

I think we should report these non-collisions for a better knowledge of the risk. To speak like insurance brokers, to day we do not work on risks but on sinisters, which are bad consequences of risks.

II. INFORMATIONS WRITTEN ON PAPER TOWARDS THE PILOT.

1st/. Permanent circulation.

Studies permitted to draw charts showing permanent circulation of birds between feeding areas and resting areas in the vicinity of many airports. These charts are included in A.I.P. (Air Information to Pilots). This enables the crew to manage their flights so as not to interfere with birds routes or, if impossible, to vacate them as soon as possible.

2nd/. Seasonal migrations.

Studies permitted to forecast seasonal migrations and to draw charts. Crew are informed by special notams called "Bird-Tam" precising dates, altitudes, axis and bird species. Same use than above, but as migrations are long haul flights not limited within the vicinity of airports, these informations are useful for the choice of cruising levels.

III. INFORMATIONS RADIO-TRANSMITTED BY PILOT.

After an actual collision with birds, pilots inform A.T.C. controllers, for them to make sure that birds corpses are removed from taxiways and runways; and then to record the incident. This is complementary to paper report first evoked here.

Besides, pilots inform A.T.C. contollers when they meet birds without collision, for them to warn following landing planes and aircraft attempting to take-off soon as well. This information, precious to avoid collisions though it be, is lost on the long term and now useless to make way in bird hazard fighting.

It is the reason why, I repeat, State Aviation Departments should act in order that non-collisions will be paper reported just like actual collisions.

Surely, of course, it is not prohibited to do so; but crew members are fond of papers and if some of us neglect to report actual collisions when the plane is not damaged, most, not to say all, will not report non-collisions if they are not officially urged to do it.

IV. INFORMATIONS RADIO-TRANMITTED TOWARDS THE PILOT.

Airport A.T.C. controllers used to warn crew when birds gathered near the landing axis, on the runway or nearby. Often, birds were signalled by prior crew. This is always true, but with the increase of the number of collisions -associated to the increase of the number of jet planes fitted with wide air intaked engines- airmen feel more concerned by bird hazard, and warnings are now more frequent.

More and more airports are now fitted out with ATIS (Air Terminal Information System). Crew listen to ATIS before or/and while descending. In any case, via ATIS, they get bird warnings long before landing. This enables them to anticipate their behaviour and take preventive measures like switching on the landing lights, perhaps the radar though its effectiveness is not prouved, reducing speed, delaying descent along intermadiate approach; whereas via A.T.C. controllers, the crew get bird warnings only when in final approach.

But ATIS should be regarded as a pre-information bacause it is not permanently updated. ATIS indicates a potential risk. Fortunately, birds wandering around an airfield are not permanently on the landing axis nor the runway. This ATIS pre-information ought to be completed by the A.T.C. controller with a right-now up-to-date information only when the incoming plane is concerned.

But, so as not to loose its effectiveness, ATIS should not be unwisely over-used. Airport Authorities should not consider quoting bird hazard on ATIS as a legal umbrella, shifting their responsibility onto aircrew; and should not aim to argue after an accident that warning gave them quietus of their duty. On some ATIS, we can hear "unusual bird situation" most of the time and most of the time we do not see any bird. The result is that pilots do not care of it. To much information is equal to none. If one is shouting "HELP, FIRE" every morning, firemen will not rush when his house will burn.

More, if the risk is actual most of the time, it is not "unusual" as said on ATIS and should be written on A.I.P. as permanent circulation (above mentioned).

. . .

In any case, the crew range of action is often narrow:

When taking-off, the crew can see the birds before or after the Airport controller signals them. Then the pilots can delay the take-

off, waiting for the birds to move away by themselves or be artificialy scattered; or modifie its take-off procedure -i.e. full power instead of de-rated power, cancel noise abatment procedure, alternate routing instead of S.I.D. (Standard Instrument Departure), delay rotation after V2 (normal take-off speed) or else-.

When landing, the range of action is extremely small. Obviously, it is impossible to stop and watch birds behaviour, vaiting for them to clear the way. The pilot has no time -especially if the crew is reduced at two members- to scan the sky and focus on the birds mentioned by the Airport controller. When on short final, where we meet more birds, the pilot neither can change its path nor perform an avoiding action. Or, if he does so, he is compelled to go around, any deviation respect to normal trajectory being leading to a dangerous or impossible landing for an heavy aircraft.

This is to show that it is more important to scare birds out of airfields than to warn pilots that birds are sitting tenants.

. . .

Meanwhile, as a conclusion, it seems useful to conduct an efficent exchange of suitable informations between ground and planes and vice-versa.

Nevertheless, we wish all the birds to be wise enough to avoid collision with planes and, if they fail in doing so, that the consequences, always lethal for them will be minimum for the aircraft and its passengers.

+ + +