

### A HUGE RUSSIAN BOMBER

The Kalinin K-7 an experimental aircraft, designed and constructed during the 1930's. However, we at the Bugle feel that there is some CGI (computer generated imagery) of the original design to make it a fearful weapon. (Note the man standing atop one of the huge guns) Also people standing by the undercarriage housings where stairways to the main body were accessed. Can you begin to wonder at the control runs to all the ENGINES (which we understand had a team of operators specifically for THEM), never mind the flying surfaces THAT were moved by huge aerodynamic servo surfaces.

There is some credibility for the thickness of the aerofoil section of the wing. Its designer Konstantin Kalinin was a pilot and obviously understood the importance of a good lifting aerofoil section, very important for carrying a good bundle of ammunition. Imagine firing one of those huge cannons – in flight, the recoil would probably slow the aircraft to near the stall or tear itself from the mountings.

Whilst this aircraft did fly in its original design it suffered from severe vibration and engine resonance and some modifications were made to strengthen the airframe. Sadly it crashes after a few flights when one of the rear tail booms broke in flight jamming the elevators, resulting in a shallow dive into the ground killing 14 people and one on the ground.

Konstantin Kalinin was not on board at this time (lucky for him). However two more prototypes were started and cancelled in 1935. Poor old Konstantin fell foul of Stalin in 1938 and was executed as





an enemy of the state. Didn't Mr Stalin realise this man was a genius who had built and designed the largest aircraft in the world long before the jet age. The wing span was equal to a B-52 but double the wing area, and probably six times as thick the only thing it lacked was about 8 large jet engines similar to those of a B-52 to give it a bit of OOMPH..!! and a bit more speed. Those old piston engines struggled to make 120 knots, and that was downhill.



The picture above is more like the original design than the enhanced pictures above.

We think the undercarriage could have done with a couple of engines to reduce the parasite drag.



This picture gives some idea of the original design that actually flew.

The huge elliptical wing was thick enough to seat some 120 passengers providing them with an excellent view of any impending danger through the large leading edge windows whilst sipping a large complimentary Vodka..!

These engines produced 700HP to 830HP (approx 4900 – 5810HP).

The Lancaster Bomber engines produced 5120HP and flew 2  $\frac{1}{2}$  times faster.

Now, we at the Bugle are not too sure of the facts, but the B52 appears to produce a total of some 136,000HP...! That alone would rip the socks off the Kalinin K-7.

Also, note the large aerodynamic servo tabs to move the heavy control surfaces, without which would have required several Gorillas at the controls.

We are not sure who had control of the many engines as the pilot was probably quite busy just flying this machine.

Good effort, considering the period in time, quite a step up from the Wright Brothers.

## OLYMPIC OPENING HOURS

Sadly local councillors have rejected BHAL request for extended opening hours for this prestige event in 2012. Concerns were raised about creating a precedent for future changes of the current lease as well as other fears including an increase in noise pollution. There is probably far more noise pollution around Biggin Hill from the sirens of Police, Ambulance and Fire Services which seem to go on forever, whereas the aircraft make very little noise by comparison and fade away very quickly while the sirens continue to alert the whole of the surrounding area off the airport and Biggin Hill village, day and night.

### HOW GOOD IS THY MEMORY



Do you remember this young lady 13 years old Adéle Park, pictured here with her Instructor. Mr Stewart Craft, of the East Bucks Flying Group. This picture was **Private Flying** published in Adéle eventually October 1956. Biggin Hill arrived at and Instructed with the Active Flying Club.



Lt Cdr Thomas Sargeant of the Royal Navy Fleet Air Arm (third from left), with a Prentice load of willing passengers. Tom flew a Walrus aircraft from the HMS Belfast during WWII.

Tom was a character larger than life and a regular visitor to Biggin Hill for many years with his two Scotch Terriers which regularly rolled in the gentleman's urinal area at the side of the old S&K Bar and would then proudly strut around the bar with a profound smell as they became warmer and warmer – the smell was awful. Of course Tom would have to drive home with them in the car.

AIRFIELD PERSONALITIES



Valerie Anand: came to Biggin Hill and joined Flairavia Flying Club in 1965. During her first flight in a Tiger Moth, David St Leger was her Instructor. It was a memorable flight. She recalls the Tiger Moth as being extremely cold and uncomfortable and was surprised to find the aircraft had no brakes and had to be landed on the grass so that the tussocks would help it roll to a halt after landing.

Back in the clubhouse, she vividly remembers sitting on a radiator to thaw out. Valerie asked aloud why Tiger Moth cockpits have never been covered and why no one had ever added brakes.

This did not go down very well with those present, she recalls. "Good Heavens," they said, "have you no sense of tradition? Tiger Moths MUST have open cockpits and brakes would spoil their ancient charm." She says her teeth were still chattering and she still didn't agree but as a minority of one, she decided to shut up.

Shortly afterwards, word went around that a member of the Tiger Club in Kenley HAD covered his and provided it with brakes ! Valerie continued her training in a Champion and went solo in her favourite aircraft- G-APYT.



During her cross-country training she recalls a flight to Stapleford-Tawney in snowy weather. A useful landmark on this trip was a small white tower – but in the snow it wasn't visible. She admits wandering around quite a bit before identifying her position. Her Instructor that time was Ian Dalziel. Valerie gained her PPL but left Flairavia in 1969.

Other events took control of her life, like marriage and editing inhouse magazines and newsletters for companies big enough to require them.

Valerie is now a full-time historical novelist, partly under her pseudonym Fiona Buckley. Her last two books under her own name, were set on Exmoor on the fifteenth and sixteenth centuries.

## FLAIRAVIA FLYING CLUB

Was one of the more flamboyant clubs of the day at Biggin Hill operating a fleet of 10 modern aircraft and a well stocked bar for members, also attended by many other pilots of the era.

A column published in 'Flight' 1967. Flairavia Dines:

The Flairavia Flying Club, one of the most rapidly expanding of the Biggin Hill Clubs, held its dinner on January 27, with Mr John Hunt, MP for Bromley, and Wg Cdr Stanford-Tuck, the well known fighter pilot from Biggin Hill, as principal guests.

Winners of the club's annual awards were announced and the presentations made. The Presidents Cup went to Mr George Bracewell as the student who had "striven most to gain his licence in the minimum practical time." The Chairman's Student Pilots Award was made to Mr R.P. Underwood for "best progress during the year." With a ten-aircraft fleet including a comprehensively equipped Bolkow Junior, the club encourages long distance touring by its members, and Mr Norman Brown was awarded the Flairavia Cup for a for a flight to Palma.

To encourage the progressive spirit the Alan Bramson Cup is awarded to the private pilot who has striven most to increase his knowledge to fly safely under all conditions: the award was made to Mr John Marshall. The Ladies Flying award for progress under training was made to Miss Catrina Spencer-Nairn, who went solo after 8hr – 50min of dual instruction.

A new trophy established by the club – The Bolkow Flying Award, for noteworthy flying in the clubs Junior – was made jointly to Dr Ian Dalziel and Mr Chris Allison for successfully landing a Bolkow Junior back at base after the canopy had blown off in flight.

(The editor was holding at the threshold of 29 and witnessed this event – with the two pilots being blasted by the airflow – talking to the pilots afterwards they said they needed full power to overcome the drag and were unable to maintain level flight -- they only had a controlled descent to the airfield).

The Club also had a joint share in two flying scholarships. The first of these, with the *light Aeroplane* and open to anyone, was won by Mr C Brunning for an article entitled; "Why I want to learn to fly." Details were also announced of the second scheme, the Lesley Memorial Flying Scholarship in memory of an RAF pilot killed in the war. This scholarship has been founded by the pilot's mother who wishes to remain anonymous.



Flairavia Flying Club award winners with two of the principal guests at the club dinner on the  $27^{\text{th}}$  January 1967.

l to r column 2 – Mr J Marshall, Alan Bramson Cup; Mr N Brown, Flairavia Cup; Mr C Brunning, Flairavia "Light Aeroplane" flying scholarship; Mr Leslie Crowther of TV fame; Miss C Spencer-Nairn, Ladies Flying Award; Mr C Allison, joint recipient of the Bolkow Flying Award; Wg Cdr Standford-Tuck; Mr D Porter, Flairavia Manager; Dr Ian Dalziel, joint recipient of the Bolkow Flyig Award; Mr G bracewell, President,s Cup; Mr R.B.Underwood not in the group picture, received the Chairman's Student Pilot Award.

### Editors comment;

These were the good old days when flying clubs had annual dinners which encouraged the members to remain loyal to the individual club. Pilots Pals became the final Social Venue on the airfield, it sadly closed in August 2007. JB

# SOLO FLIGHT IN ONE DAY

On July 29<sup>th</sup> 1969 Miss Penny Brahms became the first woman in Britain to solo after only one day's flying instruction. The nineteen year- old actress received her instruction in a Beagle Pup 100 at the Flairavia Flying Club at Biggin Hill, from the club's CFI, Mr David Quirk. Miss Brahms made five flights of from 1hr 15min to 2hr 5min duration and performed all the basic manoeuvres except She completed 7hrs spinning. 45min of flying before completing one solo circuit, and had an average of 30min rest between flights.

Miss Brahms had never previously received flying instruction but had read *Flight Briefing for Pilots* and



other books on flying.

Mr D.J.Porter, the Club's Principal attributed her success to natural flying aptitude and to the characteristics of the Beagle Pup.



## TRESPASSER ON AIRFIELD

A member of the public found trespassing on Biggin Hill Aerodrome in the mid-1960's was fined £40 at Bromley Magistrates' Court on August 1<sup>st</sup>. The man had been driving a vehicle on the manoeuvring area and refused the commandant's order to leave. The prosecution was conducted by The Board of Trade under rule 33 of the Rules of the Air Traffic Control Regulations 1966.

(Wonder what happened to that nasty old commandant?)

## SPOTTED AT BIGGIN HILL

on the manoeuvering area these aviation types were undisturbed as they pose by their flying machine about the same time interval as the above article and they weren't one



bit concerned about Rule 33 of RoA. and the airport commandant.. Stuart Hoare, posing with his Percival Procter, G-AHNA his wife Janet and his mother, photography by Norman Rivett.

We at the Bugle request the oldies of Biggin Hill to search their attic for old pictures and flying stories.



PAINTING OF A MILES GEMINI AT CROYDON IN THE FIFTIES This beautiful picture has prompted the Bugle to publish an article published in Flight during the early years (1957) of the proposed demise of the airport as one of London's leading airport for the time. The appendix can be read at leisure for those who wish to read this report.



THE ABOVE PHOTOGRAPH IS PHENOMENAL AND REAL NOT AN APRIL FOOL'S JOKE.

This is a unique shot and suffers from some parallax distortion of a telephoto lens – the photographer was lower than the actual take-off ground and looking past cars, masts, fences even the man looks to be almost able to touch the aircraft. All of which were some distance clear.

What would the passengers think if saw a similar view from within...!



An Airport's Struggle for Survival Mr A. T. Pugh

The sands are running out for Britain's most historic airport. The exact day of demise has not been set, but the method of execution has. It will be death by strangulation; a cessation of flying. gradual running down of facilities, and the creping paralysis of houses and shops spreading across the face of a once-fair airfield. The bustling activity of business and charter flying, scheduled flights and training programmes will be shouldered out – so that the grass acres, the hangars and administration buildings can be sold to offset a little of the cost of doubtfully adequate Gatwick Airport to the south.

This is not execution as the result of a process of natural evolution. It is economic murder, and it is likely to be committed for the most tragic reason of all - failure to appreciate that the victim has not only the right, but ample justification, for survival.

Not because of the airport's historic associations, great as they are (*recall the flying training of King George V1, the DH. Comet's departure for New Zealand, the birth of Air Transport and Travel, Instone Airlines, the growth of Imperial Airways*), but because Croydon *is an essential London Airport*. It is not sufficient to argue that it must be closed because it cannot be developed into an airport for modern commercial transports when the urgent needs of other sheres of civil air commerce are overlooked. It seems unthinkable that Croydon's advantages of geographical position, developed installations, hangarage, and maintenance facilities and a size and surface sufficient for aircraft of 25,000lb gross weight should be dissipated at a time when the growth of air traffic is so rapidly outstripping the most carefully calculated forecasts of a few years ago.

The need is so obviously for *more* airports for London, not for less, that one so advantageously situated as Croydon can never outgrow its usefulness.

Indeed the number of movements at Croydon has more than doubled since 1953, and in the past 12 months was a record 75,000.

The development of "The Airport of London" at Croydon was no accident; it was a logical choice of location, half an hour by car from the city and beyond its suburban fringe. That houses have been built around the airports periphery in no way affects the right of aircraft to operate; Gatwick and London are similarly affected, and complaints of noise (and not very much noise) came ill from those who buy seats too near the band. Even if the journey to Croydon now takes 45 minutes from London, it is till the only developed business-airport of useful size within anything like easy reach of the city centre. And rather than outgrowing its usefulness, Croydon airport is ideal – in size and situation – for the development *and active encouragement* of the important field of executive, business and charter travel.

There is every reason to forecast an expansion of this aspect of the civil aviation business, an active nucleus of which already exists at Croydon. A European free trade area – when it comes – should bring an increasing executive interchange between European capitals; a function ideally suited to the range and capabilities of the new generation of business aircraft appearing on the world's markets. Encouragement of a home market for British aircraft of this type – so far woefully lacking – could also result in good business from aboard, both in the purchase of aircraft and the less tangible economic advantages of more business being brought to the nation's capital. Croydon could become for London what Teterboro is for New York; a thriving, prosperous airport geared to the needs of the private and executive aircraft pilot. Customs clearance would be rapid (because of individual treatment); there would worth the candle. Even north of London further from the short sea crossings to the continent, the choice is meagre in the extreme.

Elstree has but one runway, Denham and Panshanger are to small, Luton and Stapleford Tawney too far from the city centre; by its very nature super-short-haul traffic demands that surface travelling time be

The past ten years should have made us warv about under estimating the growth of air transport. We live in a world which seems continually unable to keep up with the hungary demands for more facilities, more equipment, more airports. In Great Britain, we talk about a third airport for London (having advocated the expenditure of another £17 million on the £30 million original) - yet in the same breath talk closing about down Croydon. It may not be an exaggeration to say that if, in fact, London does throw away Croydon, future historians may judge the we threw away with it a vital part of our capital's commerce.

kept to an absolute minimum. This is the basis upon which inter-city centre helicopter STOL and VTOL services justify their relatively low cruising speed and – as there is yet no helicopter or STOL base within the Metropolitan area – Croydon might well supplant Gatwick to become an ideal proving ground for the experimental services.

Aeronautical prophecy is an art too fraught with pitfalls for dogmatic assertions to be made with safety. Before Croydon is dismissed as redundant in the scheme of London's airports it might be as well to recall Mr A.V. Cleaver's remarks in an article in *Flight* for March 15 that most prophets are optimistic about what can be done within five to ten years but their pessimism about the possibilities for the next ten to fifty years has verged on the ludicrous. Even if it cannot be foreseen (though to a worthwhile extent it can) how Croydon will be needed five, ten or fifteen years ahead,, it is still an act of irresponsibility to allow the airport to be closed (in the words of Mr. Airey Neave) for "the obvious economies which it would give in running costs, manpower, etc., [and for the] substantial value from its sale, which will balance in some part the very heavy cost of building Gatwick."

The possibility of helicopter into Croydon has not been overlooked by the Ministry of Transport and Civil Aviation – but only as a passive result of "helicopters coming into general use for air services" when the airport is closed. The Ministry's thinking on this point is by no means clear; be facilities for hangarage and refuelling, and provisions for occasional repairs to visiting aircraft by maintenance facilities such as exist there today.

If Croydon is not to supply this service, which airport is there that will? Not London Airport, long effectively closed to this type of aircraft; nor Gatwick, once to be the new for all of Croydon's operators, but now soon to heavily commited with the commercial overflow from L.A.P. and those independents who urgently require the facilities the latest airport can offer. A new home for Croydon's private and business aircraft and flying clubs is a question on which Mr Harold Watkinson, the minister of Transport and

Civil Aviation, "Is still consulting with Secretary of State for Air." The prospects – if the Ministry is not to discourage utterly a traffic responsibility which it should nurture most carefully – are bleak. As each possibility is examined the practical choice dwindles. Blackbushe is too far from London for the purpose and would present an uncomfortable variety of traffic in the circuit. Biggin Hill has been suggested; but access is poor, terminal facilities do not exist, and air the traffic control problem rivals that of Croydon. Even Southend has been considered; but Southend has been earmarked as a second alternate to London, the need for which was appreciated by the Millbourn Committee in their report on the development of London Airport.

"We recommend," they said, "that early consideration be given to stage 2 of the Gatwick Plan and also to the possibility that yet a further airport will need to be developed by 1970."

There are slender possibilities of developing smaller aerodromes such as Kenley, Fair Oaks or White Waltham, but only at the price of rejecting Croydon's obvious advantages of facility and location. It is doubtful if the effort would be worth the candle. Even north of London further from the short sea crossings to the continent, the choice is meagre in the extreme. Elstree has but one runway, Denham and Panshanger are to small, Luton and Stapleford Tawney too far from the city centre; by its very nature super-short-haul traffic demands that surface travelling time be kept to an absolute minimum. This is the basis upon which inter-city centre helicopter STOL and VTOL services justify their relatively low cruising speed and – as there is yet no helicopter or STOL base within the Metropolitan area – Croydon might well supplant Gatwick to become an ideal proving ground for the experimental services.

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The M.T.C.A. is right to consider carefully – in spite of arguments as to "who was there first" – the reactions of residents to the aerodrome on their doorstep.

But the Croydon Chamber of Commerce (many of those members, in their private lives, are Croydon residents) say that complaints of noise come from a "vociferous minority," and they themselves are campaigning actively for retention of the town's airport and the employment and prestige which it provides. In correspondence that has passed between th M.T.C.A. and the Chamber since the9 latter laid an appeal before Mr. Airey Neave, Joint Parliamentary Secretary to the M.T.C.A., the Ministry concur that "there are substantial and cogent arguments for both sides" on the decision to close Croydon airport.

Briefly, the M.T.C.A. case for closing is that increased activity since the decision was made in 1953 in no way affects its suitability; for overall economy of the land can be better used; the availability of Croydon cannot ease L.A.P.'s problems, and the airport cannot remain open because of the conflict between its air pattern and the patterns of other London airports.

For their part, the Chamber of Commerce support the retention of Croydon by declaring that business at Croydon is increasing to an extent where – even when some of the larger operators move to Gatwick – the other operators and maintenance companies will be cramped for space; an alternative to Gatwick and London is required [this is hardly valid; an additional Customs airport is what is needed]; Croydon provides the only convenient pilot – training airfield for South London; it is an *active business airport* and it provides an excellent base for maintenance with adjacent facilities for testing. They also claim, with every justification, that air traffic control should be the servant of aviation and not its master.

Even if - as is suggested here - it is accepted that the value of Croydon is as a business and charter London airport in its own right, the problem of air traffic control seems likey to be a sticky one to solve.

With the separation standards demanded by the accuracies and workload on the airborne and ground aids now in use, delays occur at London Airport when aircraft from Croydon elect to fly airways, because the altitudes they are using are frozen to other traffic.

The magnitude of the problem that presents itself when the integration of the traffic patterns of London, Gatwick and Croydon is considered is such that the M.T.C.A. has advanced the difficulties as a major reason for closing Croydon.

Here is a problem to test the metal of such men as the Guild of Air Traffic Control Officers.

At first sight it certainly seems that Croydon aircraft will be able to continue to use airways – at least until better short-range navigation aids and radar are available – and Croydon's scheduled service operators might do well to re-examine from the point of view of regularity their decisions not to move to Gatwick.

But to close the airport on this ground to business and light aircraft is obviously unsound, and a short term answer to Croydon's air traffic control problem might well be in the extension of the present "free lane" system, which can be operated in in considerably poorer weather than the present standards of V.M.C. (which are unlikely to survive much longer). Such a system, given co-operation (and it does not seem unreasonable to demand that all expect local flights should carry radio) is a practical free lane to Redhill – Tonbridge railway line, along the line to Tonbridge and then in a cone to the south. A better route might be to fly to Tonbridge direct, but this line would not be well defined. Traffic approaching London in this sector is flying at 6000ft and would not be in danger, but careful consideration would have to made to the needs of West Malling and—if it continues in operation—Biggin Hill.

Visual marking of the free lanes is, at first sight, a very attractive proposition of experiments have shown that when conditions were bad enough to make lights necessary, the markers could not be seen. Nevertheless, this aid should be practical provided that there are sufficient markers, they are of the latest highest intensity type, and the weather minima are not too low.

A free lane system for Croydon is at best, a short-term solution only. But it might suffice until the development of an integrated London air traffic control system—including Croydon as London's business airport—materializes.

The axe over Croydon's head is suspended there with the intention of ending—come what may—an airport that in 1953 was decree "unsuitable for development" as an alternative to London Airport.

But in five years of this fast changing aviation business the White Paper of the time has become out dated—and has been shown to be unimaginative—as the contemporary forecasts of future traffic. A civil aviation growth curve that sees a doubling of traffic every five or six years is sound justification for the survival—and active encouragement—of a businessman's London airport.

For once the irrevocable step of closing-down Croydon has been taken, there can be looking back; the airport would be lost forever. but previous arch 15 that most prophets are optimistic about what can be done within five to ten years but their pessimism about the possibilities for the next ten to fifty years has verged on the ludicrous. Even if it cannot be foreseen (though to a worthwhile extent it can) how Croydon will be needed five, ten or fifteen years ahead,, it is still an act of irresponsibility to allow the airport to be closed (in the words of Mr. Airey Neave) for "the obvious economies which it would give in running costs, manpower, etc., [and for the] substantial value from its sale, which will balance in some part the very heavy cost of building Gatwick."

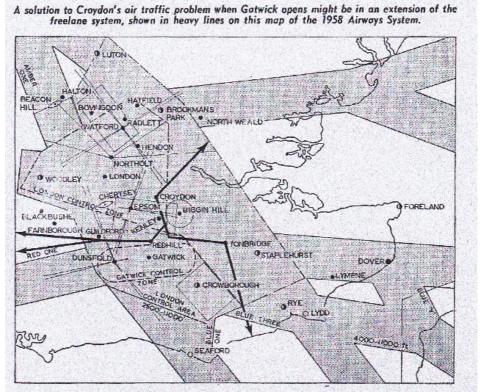
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