

Pilot

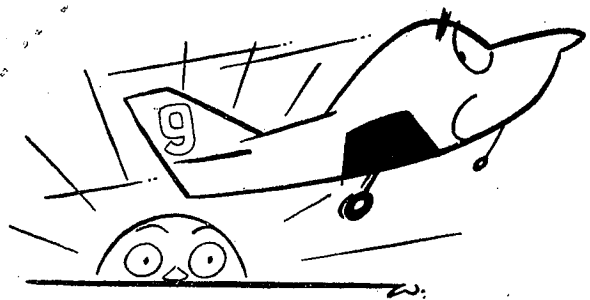
lightaeroplane

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For Business and Pleasure



Dawn to Dusk Competition
Know Your Aeroplane
Homebuilt Amphibian



FROM DAWN...

A SUMMER DAWN IN ENGLAND IS an event witnessed by very few citizens. Airfields at this time are mysterious, dewy places populated by surviving hares or pheasants, and strutting crows. This is an exciting time to fly. The air is smooth and predictable as one climbs over a still, sleeping world to meet the rising sun. Pilots appreciate the magic of flight at such times and for years 'Dawn Patrols' have been a feature of the lively flying club's programme.

The pilot who is airborne early on a June morning in Southern England has over seventeen hours of daylight ahead of him. The 'Longest Day' competition at Biggin Hill has for many years exploited this in providing a team challenge for duration flying. The objective is to keep an aircraft airborne as long as possible in one day. The emphasis is on teamwork, especially at the ground turn round, when the aircraft is landed, refuelled and oiled, new pilot strapped in and got airborne in times often measured in seconds. Winning teams have kept their aircraft in the air for astonishing fractions of the total daylight available.

The Tiger Club's 'Dawn to Dusk' Competition came into being as a solo pilot endurance event in 1964, thanks to the initiative and drive of Chairman Norman Jones. Competitors could choose any day in the week preceding or following midsummer's day and had to start and finish at Redhill between the hours of 4.30 am and 9.30 pm. All arrangements were to be made by the pilot himself and points were to be awarded for originality, initiative and good airmanship as well as for time in the air, distance flown and fuel consumption. The route was to consist of straight line legs between ten designated airfields in Southern England and a compulsory stop of thirty minutes at each refuelling point

removed the possibility of dangerous haste at turn round and even allowed time for a short nap under the wing of the aircraft. After his ordeal the competitor had to submit a log of his flight within forty-eight hours.

now fly any aircraft and could roam anywhere in England. Criteria for judging were unchanged but consideration was to be given to aircraft type and equipment in view of the fact that the competition was to remain



Mick Bialkiewicz: Overall first place of the 1970 Dawn to Dusk competition

The response in the first two years was not particularly encouraging, there being only four entries each time. The pilots who took part had a fascinating and sometimes exciting day's flying, learned something about their aeroplanes (notably that the Volkswagen engine's carburettor ices up quite badly in the early hours of a June morning) and were covering distances of over one thousand miles in the second year. The rules stipulated Turbulents as mounts at this stage and so comparison of pilot performance was relatively straightforward.

In 1966 the competition was thrown open to all pilots. They could

a test of pilot efficiency and not of aircraft performance. A new trophy, designed by Chris Wren and donated by HRH The Duke of Edinburgh, was an added attraction and there was prize money now totalling £175. In the event a Turbulent won again with little change in distance covered, but the pilot coaxed a marginal increase in speed and an impressive thirty-three miles per gallon out of his machine. (Speeds are quoted in knots and distances in nautical miles.)

1967 introduced two major changes to the rules. The crew limitation was lifted to two and competitors could fly anywhere in Europe. This

encouraged well-equipped touring aircraft to take part but to retain the interest of the solo ultra-light machines there was the Icarus Trophy and a prize of £50 for the best single seat performance. Sixteen types of aircraft entered this time, ranging from Turbulent to Twin Comanche. The new rules gave more scope for flights with interesting objectives. The most ambitious flight was by the pilot of a German Jodel DR1050, fitted with long-range tanks, who flew to Dusseldorf, then to Bergen in Norway, across the North Sea to the Shetlands and back to Redhill. Another pilot managed a circular tour of the British Isles and a third took aerial photographs of eighteen English Cathedrals.

Poor weather had reduced the number of starters in 1967 and things were even worse the following year, the weather hitting the single seaters particularly badly. Hubert Schnabel (of the Dusseldorf Aero Club) changed his mount from a Jodel DR1050 to a Mooney Mk 20A and his position from second to first. His flight was a spectacular two thousand mile tour with forty-four turning points, covering eight countries and seven seas. The winning aircraft of 1967, a Fournier RF4D, had weather problems but returned the best fuel consumption figures to date—38 mpg.

Schnabel improved his performance again in 1969 with a brilliantly executed flight in his Mooney Mk 20C, in which he visited twelve countries in twelve hours. In all he flew sixteen hours and thirty minutes out of the available seventeen hours, a feat made possible by his needing to land only once to refuel. This flight rather overshadowed a number of other highly meritorious flights and is likely to prove an upper limit as far as the criteria of distance flown and time in air are concerned. Six other competitors this year flew in excess of eleven hundred miles, one of them being the first Royal Air Force entry—a Chipmunk of the Northumbrian University Air Squadron.

1970 saw a welcome swing back to the ultra-lights. A Fournier RF4D covered a record distance, for the type, of 1238 miles and gave impressive confirmation of its cruise

Past winners of the Dawn to Dusk Competition with some performance details

Year	Pilot	Aircraft	Reg No	Distance (nm)	Time	Av speed (knots)	Fuel cons (nmpg)	Total entries
1964	D. Lovell	Turbulent	G-APYZ	875	12.40	69	35	4 (4)
1965	D. Lovell	Turbulent	G-ARZM	1010	13.20	76	29	4 (4)
1966	R. Voice	Turbulent	G-ARZM	1003	13.10	77	33	12(10)
1967	P. Herring	Fournier RF4D	G-AVHY	1159	14.58	77	37	19 (9)
1968	H. Schnabel	Mooney Mk 20A	D-EMMO	2027	15.29	130	15	17(11)
1969	H. Schnabel	Mooney Mk 20C	D-EMHS	2230	16.30	135	18	21(11)
1970	M. Bialkiewicz	Fournier RF4D	G-AVKD	1238	14.21	86	40	23(12)

(Number of starters in brackets)

Prizes: Overall winner — Duke of Edinburgh Trophy and £75
 Best single seat — Icarus Trophy and £50
 Overall second — Tiger Club medallion and £50
 Overall third — Tiger Club medallion and £15
 Best novice entrant — 'Pilot' Trophy and £50
 Best lady entrant — 'Bonney' Trophy and £10

In addition 'Dawn to Dusk' certificates designed by Chris Wren are awarded to all pilots who do well.

Details and Rules for the 1970 Competition will be available from: The Secretary, Tiger Club, Redhill Aerodrome, Redhill, Surrey later in the year.

efficiency when well handled by returning fuel consumption figures of forty miles per gallon at an average speed of eighty-six knots. No less than eighteen types of aircraft entered, although for various reasons only twelve competitors started. Two new trophies were awarded. The 'Bonney' Trophy was for the best performance by a lady pilot and the 'Pilot' Trophy for the best performance by a pilot with less than one hundred hours in-command experience. The winner of the latter award flew the first helicopter to fly in the competition.

The 'Dawn to Dusk' Competition is now a well established event in the sporting aviation calendar. There is a steady growth in the number of entries as more pilots realise that here is a splendid opportunity to do something out of the ordinary. It is possible that future winners will score as highly on initiative and originality as for out and out distance. Flights planned to visit major airports, National Parks and Firths, French chateaux and cathedrals have already been made. One could plan a tour of famous islands, highest peaks or track great rivers to their source. Gliding types could set off by RF4 or powered glider and explore hill

soaring sites or fly to the Alps, mountain soar there during the heat of the day, then restart the motor to fly home. The possibilities are limitless.

The Competition has fulfilled its objective to date. Great flights have been made and exacting standards set. Participants have had to work hard but have enjoyed their day and learned a great deal about the air, their machine and themselves. And they have maintained an excellent safety record while doing so.

The number of non-starters each year probably reflects the difficulty of arranging that happy coincidence of aircraft availability, day off work and fine weather over a large area of Europe necessary for a flight of this magnitude. Amongst the large body of pilots who have not yet entered there must be many deterrent factors, not least being the cost. Many private pilots fly around fifteen hours in a year and would never dream of doing it all in one day. Nevertheless there is much to be said for the occasional epic flight in one's flying career and the long days of June provide an excellent opportunity to embark on one. Anyway, about twenty pilots each year seem to think so.

... TO DUSK

by Bill Goldstraw

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