

Monthly Report.—This club, which has been recently formed, is now in full working order. A workshop has been built, and already members are starting on models of exceptionally novel designs. Several members of the club visited Olympia on Feb. 19th, and it is hoped that the various methods of construction, &c., employed by exhibitors there will be turned to good account by the members. Regarding club work, H. Smither has had successful flights with tractor mono., r.o.g. F. Armstrong doing good distances with loaded-elevator type. Members find, with r.o.g. tractors, the lighter they are made, up to a certain point, the better they stand a heavy landing.

Ecclesall and District (50, CRESCENT ROAD, SHEFFIELD).

AN "Aerial Derby" will be held on Saturday, March 22nd, at Bent's Green, Ecclesall, over a course of about two miles. Three medals offered as prizes. Will all members please attend with models.

Hendon and Districts Model Ae.C. (3, ARGYLE RD., W. HENDON)

FLYING week-ends at Cricklewood and Hendon. Competitions, &c., shortly. **Monthly Notice.**—Matters are now progressing very favourably in this club. The committee for the coming season has been elected, and there is every prospect of a good summer's work. Mr. Short has resigned the secretaryship, but has accepted the post of treasurer, jointly with Mr. E. A. Lawrence. Mr. Doidge, the former secretary, being again free to devote his time to the interests of the club, has again been elected to fill the vacant post. Please note changed address. The club has commenced flying on a new ground at Cricklewood, and some excellent flying was done there last week-end by members, Mr. Lawrence's Houlberg-type monoplane easily beat the club distance record, measurement next notice. Mr. G. Hedges is now constructing a seven-cylinder rotary steam engine. Messrs. Hills, Mitchell, Brown, Hayward, Short, Warwick and Doidge have been indulging in week-end flying during the month.

Leytonstone and District Aero Club (64, LEYSPRING ROAD).

ON March 2nd, flying at 9.30 a.m., near Bushwood Avenues. **Monthly Report.**—As a result of the Aero Show and the work it entailed beforehand, very little flying was done last month. An account of the club's exhibit at Olympia will appear elsewhere from the pen of Mr. V. E. Johnson, making it unnecessary for a repetition to appear here. All members will be glad to hear that Mr. Handley Page has consented to become president of the club. It seems a happy augury for the future. It is hoped that all members will make an effort to attend the competitions arranged to take place to-day, March 1st, at the London Aerodrome, Hendon, and the Welsh Harp.

Manchester Model Ae.C. (14, WARWICK RD. N., OLD TRAFFORD).

Monthly Notice.—The club hopes to make the present season the most successful since its formation. Flying meetings will be held each week at Trafford Park Aerodrome and a special feature will be the holding of aggregate competitions. Next meeting, March 8th, at 3 p.m. Tractors, r.o.g. and hydro-aeroplanes will receive special attention and certificates for such will be awarded as in the hand-launched models tests. The secretary will be glad to receive as many subscriptions (5s.) as possible at next meeting so as to meet the expenses of the club, such as prizes, &c. A meeting was held in Heaton Park on Feb. 22nd when Mr. A. V. Roe was present and selected a suitable spot where Messrs. Hurlston and Watson gave an exhibition of flying.

Reigate, Redhill and District (8, BRIGHTON ROAD, REDHILL).

Monthly Report.—Owing to the exhibits for Olympia, very little flying has been done during the month. Hoyle, Oram, Hooton, Sutton, and several others have done well in bad weather. Mr. Burghope several times out with old Niupart, which is now "deceased." A loading test was carried out on the wings, the breaking load being 73 lbs. She weighed 38 ozs. in flying order. An extraordinary number of models are ready for the coming season. The conditions for the next competition for the "Rawson Cup" are as follows:—Biplanes to weigh 8 ozs. (minimum), r.o.g. machines, to fly for distance and duration in the same flight. Many visits were made to Olympia by the members. Several interesting machines are building, including Farman-type biplane. Several hydros getting ready. Messrs. Norton, M. Wilson, Burghope, Sutton, and Key exhibited at the Show. Members who have no time to go home for meals now take them in the lounge fitted up with stove, &c.

Scottish Ae.S. ("ROCHELLE," LIMESIDE AVENUE, RUTHERGLEN).

Scottish Model Records.

Hand-launched	Distance ...	J. S. Gordon	2,006 ft.
	Duration ...	Jas. Myles	65 secs.
Off-ground	Distance ...	Wm. C. Boyd	739 ft.
	Duration ...	Wm. C. Boyd	33½ secs.
Hydro-aeroplane, off water ...	Duration ...	C. F. Arthur	21½ "
Tractor (single) off ground ...	Duration ...	J. S. Gordon	10½ "
" " hand-launched	Duration ...	J. S. Gordon	16½ "

March 1st, duration competition at Paisley, for pair of propellers, presented by Mr. Myles; 8th, hydro-aeroplane competition at Maxwell Park; 15th, monthly competition at Paisley; 22nd, duration and efficiency competition at Paisley; 29th, hydro-aeroplane demonstration at Maxwell Park.

Monthly Report.—The r.o.g. competition, intimated for Feb. 1st, had to be declared off owing to weather conditions, but on Feb. 8th Mr. C. F. Arthur had some very interesting trials with hydro, at Maxwell Park, his times being very consistent, 15 secs., considering the boisterous conditions prevailing. On Feb. 15th, the usual monthly competition was held at Paisley Racecourse, the results being: Wm. Craig Boyd, 49 secs.; W. G. Langlands, 40 secs., 625 ft.; Ian S. Ross, 34 secs.; J. S. Gordon, 33½ secs.; J. C. Balden, 25½ secs., 493 ft. On Feb. 22nd, a demonstration of hydros was given at Maxwell Park, under very trying conditions, the pond being covered with a very thin skin of ice, Mr. Gordon gave a very good display. During the month work has been proceeding quietly, Mr. Boyd having constructed a r.o.g. and a hollow span flyer, of which details will be forthcoming soon. Mr. Gordon is finishing the construction of a tractor r.o.g. which promises well. Now that the better weather is coming the committee appeal to readers interested to call and see the workshop at 18, Holland Street, which is open on Tuesdays, Thursdays, and Saturdays, and also the fact that an aerodrome is to be opened shortly in Glasgow, may, we hope, induce more enthusiasts to join the club.

Sheffield Model Aero Club (35, PENRHYN ROAD, SHEFFIELD).

MAR. 3RD, 7 p.m., the club room at back of 32, Carver Street will be formally opened by Mr. E. W. Colver. Flying every Saturday, weather permitting, at the Standhouse Aerodrome, 3 p.m.

Monthly Report.—After the close of the weekly contest on Feb. 1st, Mr. R. E. Rayner raised the club and Sheffield record (held by Mr. J. P. Worrall with 53 secs.) to 60 secs. duration. Master C. Dewsnap made 48 secs. A general meeting was held Feb. 10th, Mr. E. W. Colver presiding. The rules for the Colver Cup and the President's Challenge Cup were distributed to those present, Mr. Colver having had them printed at his own expense. A well-lighted club-room has been secured at the back of 32, Carver Street, and is being fitted up

with benches, tools, seats, &c. All the well-known aeronautical papers and books will be placed in the library for the use of all members. Mr. Colver has kindly offered the loan of his very fine collection of aviation books to the club library. The prizes were distributed to Mr. R. E. Rayner and Mr. W. H. Bagshaw for the month-ending competition. Mr. H. Slack exhibited at the meeting a carved 30-inch wood propeller, a fine piece of work. Both the cups and the propeller will be on view in course of a week or so in one of the main shop windows of this city. The secretary will be pleased to receive catalogues and pictures on aviation to hang in the club room.

S. Eastern Model Ae.C. (1, RAILWAY APPROACH, BROCKLEY).

WEEK-END meetings:—Blackheath and East Dulwich branches.—Mar. 1st, Kidbrooke, 2.30 to 5.30 p.m. Mar. 2nd, Blackheath, 7.30 to 10 a.m.; Lee aerodrome, 10.15 a.m. to 12.15 p.m. Croydon and Beckenham branches.—Mar. 1st, Duppas Hill, 2.30 to 5.30 p.m. Mar. 2nd, Mitcham Common, 2.30 to 5.30 p.m. Croydon and District Aero Club will hold open competitions for duration with tractor models, and for distance with r.o.g. machines.

Monthly Report.—During the past few weeks members of the S.E.M.Ae.C. have had a considerable portion of their otherwise available flying time spoilt by rain and fog; but these disappointments only seem to make the members more enthusiastic, and, judging by the extremely useful work now being accomplished, this club should be in a very strong position by the time decent flying weather arrives. The support of the Croydon and District Aero Club, who have now become the Croydon branch of the S.E.M.Ae.C., has considerably strengthened the club's hands, and members will thus be enabled to obtain additional facilities. At Kidbrooke Mr. Geo. Brown has been experimenting with a type of tractor biplane. This model has the rubber encased in a body similar to the enclosed Avro, but the planes are of the Etrich type. This machine, fitted with a 4-bladed screw, is a good flyer, except in strong winds, when the large side-area causes side-slip to such an extent that a nose-dive is unavoidable. Messrs. E. Campbell, R. France, and F. G. Peter have also been flying tractor biplanes at Blackheath. These models are fitted with 4-bladed screws, and Mr. Peter's machine has made some very fine flights. Mr. B. Trask has been testing twin-propeller hydro-biplane fitted with stepped floats, but no successful flights were obtained, owing to the rough weather. Mr. S. E. Grimstone and Mr. W. R. Halnan have been doing good flights with their tractors at Blackheath and Lee, and Mr. G. H. Westwood has again been making short flights with his stream-line tractor mono., but the wings are still too flexible. At Lee, Mr. C. A. Rippon has obtained good results from his large Antoinette-type monoplane (illustrated in FLIGHT recently), also some splendid flights with a smaller tractor monoplane. Mr. F. Plummer has been getting some splendid distances from his tractor models, which are fitted with built-up fuselages. One of these recently made a flight of 253 yards, which is excellent, considering the amount of detail work embodied in the machine. Mr. L. Brough has been successful with a small hydro-mono, which rises from the water very easily. Mr. F. Dixon has been making short flights with a twin-propeller biplane, the planes of which are staggered and have a high aspect-ratio, and with a little further adjustment useful results should be forthcoming. Mr. L. Hatfull's small automatic-stability tractor monoplane has been in evidence at Lee and Blackheath. Mr. A. F. Chinnery's well-known gull's-wing tractor has been flying well, and succeeded in obtaining second place, with a flight of 136 yards, in an open competition at Mitcham organized by the Croydon branch. At Blackheath, Mr. L. B. Morris has been testing a new tractor monoplane, and at Lee has made some good flights with his single-propeller model. Dr. G. I. MacMunn has been conducting some interesting experiments with new planes on his large twin-propeller machines, and has succeeded in obtaining flights of over 600 yards. Mr. W. G. Billinghurst has in hand two very interesting hydro-biplanes, and the tests with these will be eagerly awaited. Mr. W. R. Halnan has been flying his tractor monoplane, and Mr. W. A. McLaughlin his single-propeller model at Mitcham. The hon. sec. has frequently had out his monoplane, ABC 76, and tractor biplane; also a small racer and a Groves biplane. There is still room for more members in the model section, and full particulars of the glider section will be forwarded to anyone making application to Mr. A. B. Clark at the above address.

The Croydon and District Branch (136A, HIGH STREET, CROYDON).

THE Croydon and District Club is now affiliated to the South Eastern Aero Club, and represents the Croydon District. This will no doubt greatly help and encourage our members, owing to the intercourse with many other model makers which naturally follows such a procedure. A great deal of good work has been done during February, both with tractor and other models. Messrs. Carter, Smither, Streeter, Bell, Pavely and Hart have all made and flown new tractor monoplanes. Mr. Pavely has been notably successful. He has raised the club's tractor duration record to 30 secs. and has had flights of 174 yards (officially measured) and others of 200 yards and over. An open competition organised by the club was held at Mitcham Common on Feb. 9th for tractor models (distance) and duration models. The club was fortunate to secure both first prizes. The tractor competition was won by Mr. Pavely with 174 yards, Mr. Chinnery was second with 136 yards. In the duration competition Mr. Hell was first with 55 secs. and Mr. Hart second (46 secs.). On the 23rd, Mr. Pavely obtained some fine flights with his tractor monoplane, as also did Mr. Hart. Messrs. Roden and Carter were also flying tractors. Mr. C. Smither had the misfortune to smash his large Martin-Handasyde monoplane. Mr. Clark, hon. sec. of the S.E.M.Ae.C., also turned up with his tractor biplane.



CORRESPONDENCE.

Negative Wing Tips and Lateral Stability.

[1728] I cannot quite follow Mr. FitzGerald's remarks (1715) in regard to my article on this subject, possibly on account of some misprint. In Prof. Bryan's nomenclature U is a constant and so cannot be a junction of z, while p and q are by his equations given implicitly as junctions of z.

I gather, however (perhaps erroneously), that Mr. FitzGerald is under the impression that Prof. Bryan's method does not allow for changes in the angles of incidence on the wings. It does do so, however, for all changes of incidence that can possibly arise from any motion of the aeroplane *in still air*.

No doubt the ideal method would be to calculate the stability of an aeroplane in air moving in all possible ways, but as this seems impossible one has to approximate to this result in two steps. Firstly to calculate the power in still air of return to its normal position for an aeroplane that has suffered a disturbance. Secondly to calculate the amount of disturbance any motion of the air can