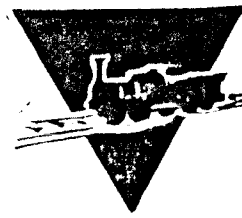


The Lionsheart



THE OCCASIONAL
NEWSLETTER OF
THE OLD
LOCOMOTIVE
COMMITTEE.

Number Four April 1985.

FIRST ANNUAL GENERAL MEETING 15th. JUNE 1985

Special Lunch alongside LION

FORMAL NOTICE IS hereby given that the first OLCO Annual General Meeting will be on SATURDAY the 15th. June 1985 at 2.15 p.m. in the Merseyside County Museum, William Brown Street Liverpool.

The formal proceedings will actually start a little earlier, by kind permission of the Director of the Museum, with an 'official' OLCO lunch in the Gallery alongside LION around noon. Archive material and Photographs of interest will be on display.

Arrangements are being made to close the Gallery to the General Public for those two hours, thereby affording our society another unique privilege.

Election of Officers, Reports (Financial etc.) and the new Constitution should take about an hour or so in the afternoon, for the "entertainment" following the formal business some film and Video of LION out and about will be shown.

The Buffet lunch has been quoted to cost as follows:-
PAID-UP SUBSCRIBERS OF OLCO £7.50 each (double ticket £14.50)
NON-MEMBERS £8 each (double ticket £15.50)

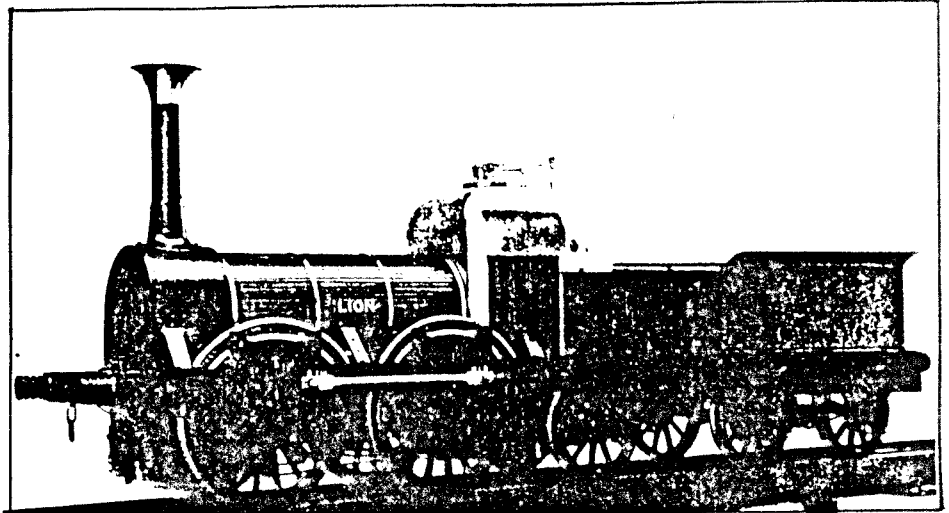
Children of members, associates and guests under 12 years of age will be accommodated at special rates by arrangement with the Secy.
A special programme for the children, under the care of volunteer 'mums' not wishing to attend the Business session, will keep them from getting bored during that long hour between the end of the Lunch and the start of the film and video programme.

Help needed

EXTRA VOLUNTEERS are needed at about 10 a.m. on the Saturday morning to assist in cleaning LION and present her looking all lovely again at the Lunch.

The advantages of a Lunch this year rather than a formal Dinner, such as was held at Wroughton last year, is that members who are unable to stay in the vicinity of Liverpool overnight and enjoy a spot of Archive delving on the Sunday morning, will be able to return home on the Saturday evening.

A 'LION' FROM 'DOWN UNDER'



OLCO member Eric Webb of Kalamunda Western Australia, has built this superb model of a 5"6. LION basically to LBSC drawings as modified by articles in Model Engineer, but with the externals from photographs ex Merseyside Museum.

The Boiler is his own design - same shape as on the prototype.

LION's and the London & Birmingham Railways 150ths. are expected to interlock, and the afternoon of the 15th. June will be the opportunity those persons interested to give a definite commitment (in addition to that of individual OLCO members) for all kinds of support.

It is understood that Adrian Jarvis, the Curator of Transport at the Museum, has volunteered to give up his Saturday evening and conduct those members who will be staying overnight around one or more of the still surviving 19th. Century Ale Houses of Liverpool. The cost of this trip will depend entirely on the length of time required by the individual members to assess the keeping qualities of the available beverages.

Lionsmeet:

25th. August

The second major OLCO event this year will be the "LIONSMEET" at the Guildford M.E.S. Stoke Park Guildford, on the 25th. Aug.

This will be the first rally devoted entirely to models of LION in steam and should be the forerunner of a big rally in 1988 planned as part of LION's 150th. birthday celebrations.

It is hoped that a small exhibition of part built models, as well as smaller scale versions of LION can be on show that day in the Clubhouse.

'PLANKS' FOR MODEL BOILERS

The size of the 'planks' which form the lagging on LION's boiler and firebox are about 'two inches plus' wide by roughly 'half-an-inch plus' thick. They are grooved on both edges to accept a tongue approximately one inch wide by about one eighth inch thick. Running along one edge is a bead, just a quarter inch in diameter which is almost impossible to reproduce in miniature.

Impossible that is until OLCO member Alan McKirdy found himself discussing the problem with a small group fellow OLCO members one evening last autumn.

Alan is, by profession, an Organ builder and Harpsicord maker, well skilled in the use of exotic woods, particularly those used in the restoration of antiques.

Scalone (I wonder who?) had scrounged a couple of scraps of LION's timber lagging during her renovation for 'Rocket 150'.

The challenge was to produce a tool that would cut strips of Pearwood, chosen for it's near scale grain, into exact replicas of that short piece of Oak, but 1:11.3 times smaller (and at least 10 - 12" long!

Cont. on page 7

Dates for your diary

- APRIL.**
 3-9. 'Iron Duke' in Kensington Gardens. This reproduction Broad Gauge Engine will named at Noon on the 3rd. by the Duke of Wellington and is expected to run with one coach every day until Tuesday 9th April.
 6-11. IMREI '85. International Model Railway Exhibition at the Wembley Conference Centre daily 10.00-18.00hrs.

MAY.
 25-27. WROUGHTON, Viewing Weekend.

- JUNE.**
 15. OLCO A.G.M. Merseyside County Museum. Special LION Lunch at noon.
 16. OLCO archive pricing at Prince's Dock.
 16. WROUGHTON, Roadcraft Day.
 28. Last Date for Copy to Editor for LIONSHEART No.5.

- JULY.**
 14. WROUGHTON, Viewing Day.
 20-21. Guildford M.E.S. Exhibition and Traction Engine Rally. Stoke Park Guildford.

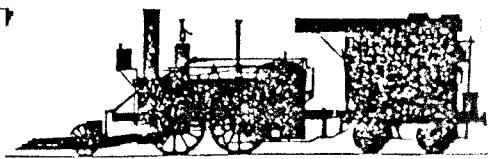
- AUGUST.**
 11. WROUGHTON, Viewing Day.
 25. LIONSMEET, GUILDFORD M.E.S. All day Rally of models of LION.

The G.W.R. 150th. anniversary celebrations will be at both SWINDON and DIDCOT throughout the month.

- SEPTEMBER.**
 8. WROUGHTON OPEN DAY. Possibility of 'Sans Pariel' in steam.

U.S. SMITHSONIAN LAYS CLAIM TO OLDEST "WORKING" LOCO.

'JOHN BULL' Seven years older than LION.



Dr. John H. White Jr. Curator, Division of Transportation, has written to LIONSHEART from the Smithsonian Institution enclosing a very welcome spiral bound copy of nearly 60 pages of press clippings relating to JOHN BULL the world's oldest operable steam locomotive. Your Editor, having recently acquired the Bachmann Coy. HO (16.5mm. Gauge) model version of this very engine is looking forward to many happy evenings reading it. This 'file' will eventually pass into the OLCO archives, but it will be available for inspection by members at the A.G.M. and, hopefully, the tiny model.

of the ORIGINAL parts actually working, and, at the moment working a little more regularly. A first quick glance through this fascinating collection reveals that it is only a sampling of the 500 or so press clippings received. That there was something in the order of 10,000 hours work and planning involved in putting 'the old gentleman' back into steam albeit for only a brief 10 hours to celebrate his birthday. This surely indicates the magnitude of our task for 1988 when we expect to be running for much longer. JOHN BULL is not expected to steam again before 2021 AD.

Friendly Rivalry

JOHN BULL's sesquicentenary was as long ago as the 15th. September 1981 which does indeed make her older than LION by some seven years. We must therefore freely acknowledge that JOHN BULL is, without question the world's oldest OPERABLE steam locomotive. Our claim to have the world's oldest WORKING locomotive is based on the fact that we have more

That said, it must also be acknowledged that OLCO has many years of research into the precise age of many of LION's bits and pieces and, no doubt a lifetimes friendly rivalry with yet another new found friend on the other side of 'the Pond' who, like ourselves, has a fondness for very elderly locomotives.

Inaugurating 'OLCO' June 1984



Stephen Fletcher, grandson of the late William Fletcher (a Founder Member of the original 1928 Old Locomotive Committee). Immediately behind him is E.F.C. The great great grandson of James Kitson and chairman of the 1984 Old Locomotive Committee. Also in the picture are Bob and Jean Grimshaw and Peter and Dorothy Bell, all of whom have done a great deal in our first year to help make OLCO a success.

It is interesting to note that their government is exactly like our government in it's attitude to spending money on such projects- nothing! Their engine, unlike our engine, has had the benefit of Museum 'protection' for very much longer, since 1885 in fact. Although retired from the Camden & Amboy in 1866 it remained in store for almost 20 years, being renovated in 1876 for the celebrations when the C. & A. became part of the Pennsylvania Railroad. In 1893 there was another steaming, from Jersey City to Chicago for the World's Columbian Exposition, and again in 1927 for the centennial of the Baltimore & Ohio R.R. One press article is critical of the fact that the 150th birthday steaming was also on the B. & O., but transporting him back to the C. & A. would have been far too expensive and far too much of a chance.

'LION' TO RUN IN '88?

It is of course expected that LION will once more run on her old familiar Grand Junction Railway metals in 1988. (Come you Route Planners where are your suggestions ? see p.2 LIONSHEART No.1)

Notice that JOHN BULL was on display for the 54 years between 1927 and 1981, apart from a test steaming in October 1980 which proved that he was unquestionably OPERABLE. During those years LION was renovated, restored, appeared in three films, two centenaries, a Festival of Britain and a sesquicentenary ('Rocket 150') which proved that she was unquestionably WORKING.

Cont. from page 1.

That meant a semicircular bead down one edge 0.5mm. in diameter, an overall width of of 4.6mm. and a groove separating the bead from the face approx. 0.1mm. (4 thou) wide.

To make them both functional and handleable it was decided to make them 2mm., almost one scale inch, thick. Alan's finished planks turned out to be 4.75mm. wide, about 5 thou of an inch, or the thickness of this page, over scale width! As we all know, wood can never be quite as precise a material as metal, but this scale effect is superb. The semicircular bead is perfect. When mounted on the calico backing the overall thickness is 2.17mm.

(They are, in fact, suitable for any steam boiler or cylinder scaled in the region of 1" to 1'.)

Depending on demand, lagging for 3.5" Gauge and 7.25" Gauge will shortly be produced.

Staining to represent the shade of any full-size timber must be specified at the time of the order.

Prices are quoted individually according to quantity and whether to be supplied mounted on calico or as separate lengths. Cutting is to order, delivery will be by arrangement.

Since they are exact replicas of the wooden lagging currently on LION, special discounts are available for OLCO members.

Enquiries (with S.A.E.) should be addressed to ALAN MCKEY, CHAPEL GREEN, LONG MELFORD, SUFFOLK.

THE LEN MORRIS FILE

9lbs. weight of
priceless data.

Those of us fortunate enough to have known Len as the Engineer-in-Charge of the renovation of LION for 'Rocket 150' will be pleased to learn that he is back from Africa, has joined OLCO as a full member, but sad to learn he will shortly be disappearing again to America. He has the addresses of the members and associates of OLCO on that side of the Atlantic, and they, no doubt will not only make him very welcome, but enjoy Len's reminiscences of the Renovation.

His very weighty file on this subject is now lodged with OLCO, and as Len cannot be at the A.G.M. on the 15th. June to talk to us about it, a set of transparencies for the Overhead projector are being prepared to give the Members a tantalizing taste of the wealth of material it contains.

Until the reappearance of the 'Len Morris File' we were all somewhat handicapped in our researches not really knowing the metal analysis of the wheels:

We now have a Test Certificate dated 25.9.79 of metal taken from the core of the wheel when a crack in the wheel-rim had to be repaired with Metalock, an operation which depended on knowledge of just which metal the wheel was made of.

On the 30th. Aug. the Ultrasonic tests gave a reading implying that the wheels were made of cast steel, but it was known that the velocity of sound in cast steel and malleable iron are very similar.

The next day a specimen of the wheel material was etched and polished for inspection. The material was of poor quality but as the surface treatment of malleable iron could make it look like cast steel a core sample was needed for confirmation.

Comparing the analysis with the composition of ARMCO magnetic Ingot Iron as recorded in the trade literature of the ARMCO Steel Corp. we get:-

%age Comp.	LION	ARMCO.
CARBON	0.044	0.015
SILICON	0.080	0.003
MANGANESE	0.035	0.028
SULPHUR	0.013	0.025
PHOSPHOR	0.210!	0.005

The next mystery is:- What does the high phosphorous content mean?

WHEEL COMPOSITION.

Mr. L.R. Tavender of Southampton is preparing an essay on the changing engineering practices exemplified by LION.

We now have a very well annotated "Aspects of detailed mechanical history" and "Locomotive driving wheels: methods of manufacture" for inclusion in future editions of LIONSHEART

STEERING C'TEE SNOWED UNDER.

The unexpected blizzard on the the afternoon of Friday 8th. February very nearly put paid to the second meeting of the OLCO Steering Committee.

However David Neish had left Guildford and our Hon. Sec. had left London, quite oblivious of any weather problem until after they had passed Taddington Services on the M1.

The snows of Bedfordshire caused an interable queue of traffic through the town of Bedford which delayed the start of the meeting at Ballards (the very hospitable home of our chairman and his lady: Es.) somewhat.

Peter and Dorothy Bell encountered the worst of the weather. They had actually left Colchester in the snow hoping for clearer conditions, but by the time they reached Luton it became obvious that they would be wiser trying to get back home whilst they still could.

In the event we were still able to have another very useful meeting as a quorum was eventually present.

We dealt with arrangements for the A.G.M. at the Museum and the steam-in of models of LION at Guildford later on in the Summer (Detailed announcements appended to this issue).

A good deal of consideration was given to the longer term perspective of our contacts with the Merseyside County Museum and our planning for 1989. "E.F.C."

SALES & WANTS.

HAS ANYONE GOT A SPARE COPY FOR SALE OR LOAN OF THE ATLAS WHICH SHOULD ACCOMPANY S. DRYSDALE DEMPSEY'S "RUDIMENTARY TREATISE ON THE LOCOMOTIVE ENGINE" Pub. 1957 Reprint 1970 KINGSMEAD REPRINTS. Box 100.

MILLING MACHINE: PREFER ONE WITH A MOVING TABLE AND FACILITY FOR ROTATING THE CUTTING HEAD FROM VERTICAL TO NEAR HORIZONTAL: DUAL (IMPERIAL/METRIC) DIALS PREFERRED PLEASE STATE PRICE REQUIRED. Box: 102.

"BAZZAR STALL" IS A SERVICE TO MEMBERS OF THE "O.L.C."

INSERTS ARE FREE OF CHARGE.

MEMBER'S SALES

CASTINGS FOR AN ACCURATE 1/8th. SCALE MODEL OF 'LION' TO STEAM ON 7.25" G. CAN BE OBTAINED FROM:- DAVID ROYLE, 3 VAN DYKE ROAD, GOSBY, LEICESTER. Special discount for Members of the O.L.C.

GEORGE PARKER BIDDER-THE CALCULATING BOY by E.F. CLARK. The life of a remarkable Victorian engineer. May be ordered direct from the publishers KSL PUBLICATIONS, Ballards, Knotting Green, BEDFORD MK44 1AA. Price £21 inc. P.L.P.

FOR SALE: 1971 Edition of LOCOMOTIVE ENGINEERING AND MECHANISM OF RAILWAYS by ZERAH COLBURN in TWO VOLUMES. Accept £180 o.v.n.o. Box 101.

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The Lionsheart

This is the first of the 'New look' LIONSHEART which will, no doubt, be loved by some and disliked by others. It is by no means the final format. The Triangular logo at the masthead is a 'Lionised' version of Pitson's 1988 headed note paper. We also have several other excellent ideas for an OLCO logo drawn by Peter and Dorothy Bell's Grandson, who is currently at Art College, and which will be revealed at the A.G.M.

Advances in Computer Technology, coupled with a few bob from a literary effort to purchase same, hopefully means that the Epson FX-80 printer will be able to perform to it's full potential and give a more interesting print-style next time.

I am also reliably informed that the 'Wordwise' chip in my BBC Micro can be upgraded to a 'Wordwise-plus' for about £20 and enable me to perform wondrous feats of word juggling.

There is also a somewhat argumentative device which purports to correct my appalling spelling, but, as has been observed by a number of you, I haven't quite got the hang of it yet.

Maybe one day I will really believe what I have to keep reminding myself - that this dumb, stupid adding machine is not really cleverer than I am - but the way the screen talks back to me makes me feel very inadequate at times. Having said that, our next issue will be after the A.G.M.

Someone with a far better ability than I may well be voted into the job, and that person is assured of my fullest support.

Nevertheless I must extend my warmest thanks to David Haley for not only doing the 'paste-up' for this issue, but for teaching me more about layout in a day than I'd learnt in a lifetime. David intends to be at the A.G.M. and looks forward to hearing your comments, criticisms and suggestions.

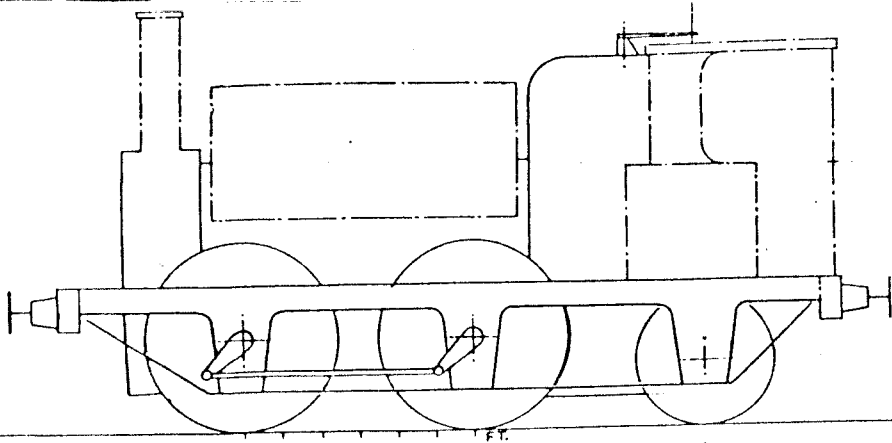
My grateful thanks also to Jean Grimshaw who so diligently typed out several sets of address labels for us.

C.E.T.N.



Your Hon. Sec and LIONSHEART Editor driving David Neish's LION on the portable track at the Guildford M.C.S.

FURTHER HYPOTHESIS ON 'LION'



*hypothetical appearance as tank engine in the service of the
Mersey Docks & Harbour Board, c.1859-1900*

RESEARCH IN PROGRESS.

Following L.R.Tavender's 'Hypothesis' in LIONSHEART No.3 suggesting that LION may originally have had 4'6" dia. wheels instead of the 5' dia. ones currently fitted has engendered some fascinating correspondence.

Our Chairman, 'EFC', is in possession of an old Kitson Account Book which is basically a Sales Ledger with copies of a large number of Invoices dated from 25th. September 1840 to 7th. December 1844.

These dates are, of course just after the break-up of the firm that built LION, Todd Kitson & Laird. Charles Todd and James Kitson going their separate ways in 1839.

However it would seem reasonable to suppose that the pricing policies of the two new companies would be similar not only to the original T.K.& L company, but throughout the Locomotive Building Industry. That is to say that for standard units (i.e. Engines) of roughly similar size it would be the Cylinder diameter which would determine the basic price to be charged, with only adjustments for wheel arrangement and weight.

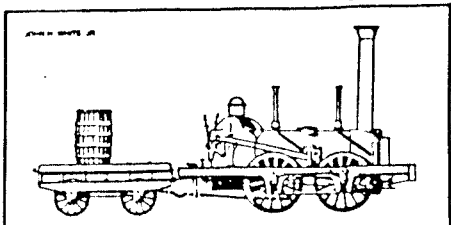
The point being that that the cylinder diameter governs the power (and hence steam consumption) and this in turn governs the boiler size- and the boiler is much the most expensive part.

Examination of the invoices shows that LION's original cylinder size and price would put her into a family of locomotives known to have been built with 4'6" drivers.

Nonetheless, Francis Whishaw, in his mammoth survey of "Railways of Great Britain & Ireland 1840" does record LION with 5' dia. Drivers.

? When was the change? Or is Whishaw in error?

'John Bull'-1831 Story p.2.



RESEARCH TEAM

NEEDS PHOTO.

Help needed to

bring into records.

ARCHIVE GRICING.

The small team of 'gricers' delving into the archives in the Large Object Store on Sunday mornings needs quite a few more volunteers to assist.

We are anxious to find an ancient photograph of an 0-4-2 locomotive, quite possibly a saddle tank, under the bowsprit of a sailing vessel or other ship being loaded or discharging cargo in the port of Liverpool between 1859 and say about 1900.

Such an engine could have been LION working as a Docksider tank engine.

Then again there is the fact that shipping technology advanced very rapidly during those years.

As the hulls were being built longer and deeper, almost every year ships were getting bigger, yet the existing docks and harbours were not that easy to enlarge and thus accommodate the newer ships.

One solution was to raise the water level in the dock above that of the river, and keep it there with an engine like LION.

If the Prince's Graving Dock didn't exist until 1900 was LION a docksider shunter, or was she pumping somewhere else?

The answer must be in those Archives somewhere. Will YOU be the first to find it?

THE TORCH • OCTOBER 1981

By MARY COMBS
OPA Staff Writer

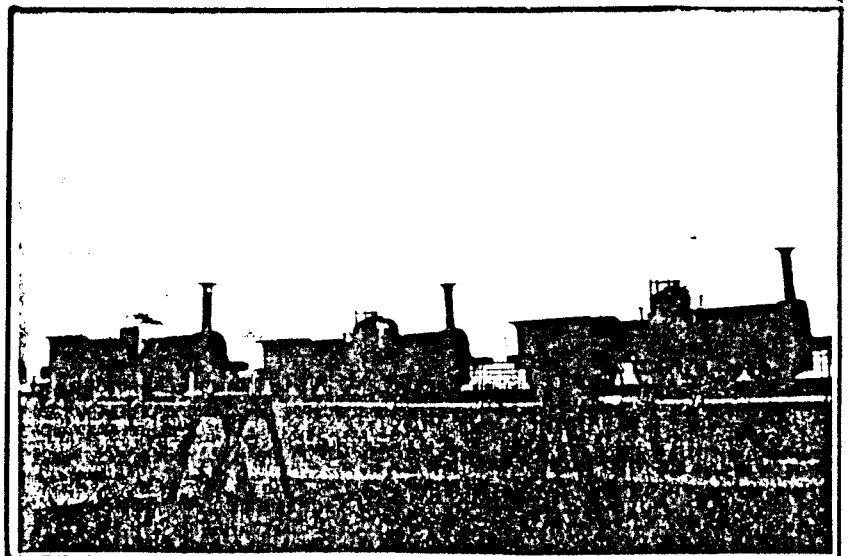
With a puff of smoke and a whistle blast, to the triumphant sound of a brass band, the John Bull steamed down the track on its historic journey, while top-hatted gentlemen and bonneted ladies waved to cheering onlookers from the wooden railway coach behind the engine.

Though this may sound like a vignette from 19th-century railway history, it actually happened on Sept. 15, as the steam engine John Bull celebrated the 150th anniversary of its first test run in the United States by ploughing the track along the C&O Canal.

Cont. Back Page.

Three of a Kind?

- Not Quite.



Here we have two models of LION posed at Wroughton with the real one, last September. Both of these models, the leading one belonging to David Neish, and the other to Keith Miller will be at Guildford for the LIONSHEET on the 25th. August, the first major rally of LIONS. David's LION will, of course, be on its home track. As a past President of the Guildford M.E.S. David is organising the whole event and it would considerably ease his task if owners of Live-steam LIONS hoping to participate would let him know their intentions as soon as possible.

