B

Southern Journey 1911-12

The object of my lecture tonight is not to lay down a definite plan for the future but rather to discuss the details of the problems with a view to giving complete consideration to them before a definite plan is made

The Southern Journey ~~[illegible]~~ is the most important ~~[illegible]~~ object of the Expedition - that object is not only important in itself but in its relation to all other objects

One cannot affect to be blind to the situation, the Scientific public as well as the more general public will gauge the result of the Scientific work of the Expedition in accordance with the success or failure of the main object - largely. With success all roads will be made easy all work will receive its proper consideration. With failure even the most brilliant work may be neglected and forgotten at least for a time.

It follows that every member of the Expedition must not only have a personal sympathy with but also a personal interest in the achievement of ~~the~~ our main object and should be prepared to make sacrifices for it as well as to help it forward by every means in his power

I believe that everyone here realizes this fact & therefore I will not dwell further upon it except to say that I propose to act with a sole eye to the achievement of the object without fear or favour

In making up the various parties and selecting those who are to go forward & those who are to go back

Zurückkommen Freitag 10/11-15

I shall be guided only by ~~a sense~~ my observation the displayed fitness for the work in hand and by no other consideration

There must inevitably be disappointments when choice is made ~~and from such~~ having regard to the excellent material ~~to~~ we possess ~~but~~ ~~I do believe as well as~~ and there may be differences of opinion on the wisdom of such choice but I believe that no serious difficulty can arise if one is honestly intent on making the best decision possible but that everyone will loyally accept the selection as it affects him

And here & now let me correct any misconception there may be on an important point – I have carefully avoided making any promises as to the service of the future. There is no one who can say he has any promise to be in the advance party or anything of that sort. I have kept my hands free & shall continue to do so until the necessity for decision arises

And now before proceeding to discuss the details of the southern problem let me add that I shall welcome all thought given to this matter. At any time during the winter I shall be most happy to talk it over with anyone who has formed ideas which differ from my own. I want the plan of campaign to be founded on the soundest principles and I realize the value of suggestions and therefore the desirability of the fullest discussion.

To come now to the problem before us.
The distance to be covered to the South Pole and back is about 1530 geographical miles
It is a very long way - by far the greatest distance which has ever yet been covered by a sledge party.
In considering the journey to the Pole I have from the beginning divided it into 3 stages
You will see on the chart how I have ~~decided~~ divided these stages
I have counted the first as approximately from Hut Point to the foot of the Glacier - to a point where one may reasonably hope to take some form of transport. The second from this point to the parallel where ice disturbances appear to cease a very varied stage as you will see
And the third from this point to the Pole - a stage lying wholly on the interior Plateau
It is obviously desirable to have a basis from which the performance of these stages can be calculated and it is equally clear that it is best to select as that basis the actual performance which has been made.
I have therefore ~~selected~~ taken Shackleton's journey as a basis
Shackleton made his actual start from Hut Point on Nov. 2nd and though I cannot vouch for their accuracy I think the following figures represent his performance

The essential points to be considered are the number of days occupied by a stage and the average rate of travel, all delays such as from blizzards included

The first stage being considered as 361 miles
S. performed it in 32 days
an average of 11.2 miles per day.

The second stage being considered as 165 Geo miles
S performed it in 21 days
an average of 7.9 miles per day
Note - there were no blizzards during this stage

The third stage being considered as 240 Geo miles
S did not perform it but taking the distance to his last camp claimed to be in 88.7 S. he did 127' in 14 days an average of 7.8 miles per day
Continuing on this average it would take 31 days in all to complete the third stage

To sum up it would take a party marching on S's averages 84 days to reach the pole

So much for the outward journey - In considering the homeward I think it is wise to combine S's figures for the 2nd & 3rd stages

The most that is to be considered are the numbers of days occupied by a stage and the average rate of travel, all delays were as from happenings in Ireland.

The first stage has consisted of 361 miles
& required it in 32 days
an average of 11.2 miles per day.

The second stage has consisted of 160 miles
& required it in 21 days
an average of 7.6 miles per day
Note. This was in happening during the strike

The third stage has consisted of 270 miles
& this last required it but taking the distance it
has left only allowing it be in 89.7 days he did
127 in 19 days an average of 7.8 miles per day
Continuing at the average it would take 31 days in all it
completes the third stage

To sum up it would take a people travelling on
So average 84 days to reach the pole

So much for the outward journey. In considering the
homeward if think it is wise it be taken 2/3 figures
for the 2nd & 3rd stages

they then stand as follows: —

	average
3rd & 2nd stages a distance of 292' covered in 18 days	16.2
1st stage from glacier to Bluff depôt 79	
a distance of 270' covered in 27 days	10 —

Now supposing S's average to have been 15' a day for the unperformed part of the return journey (the ~~third~~ last part of the 3rd stage 118') it would have taken him nearly 8 days

26 days

To sum up the homeward journey a party travelling at S's average would take 53 days to reach the Bluff depôt — The whole journey to Pole & back to Bluff on this average = 137 days

S was 53 days away from food depôts — J.S. from point of commencing man hauling to return

Same. Every thing depends on having which to carry 7 weeks food

I will leave these figures for the moment to consider the transport arrangements at our disposal more especially here with regard to the 2nd stage of the journey

It is within the bounds of possibility that either ponies dogs or motor sledges can be taken up the glacier but I think that it will be agreed that it would be unwise to arrange a plan which assumed that either of these agents could be employed on the glacier or above it

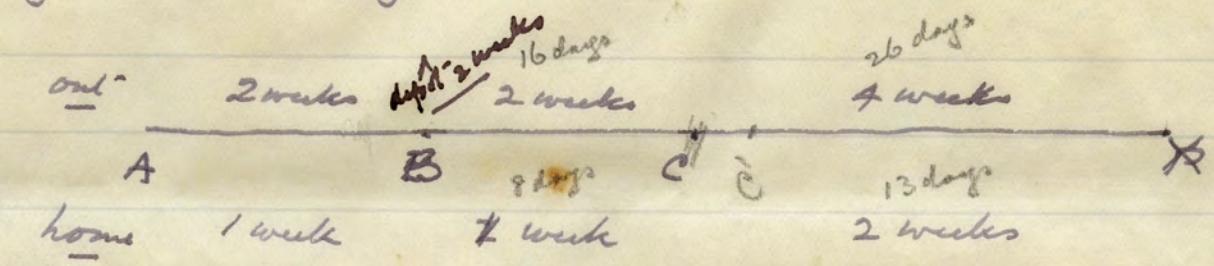
I shall have more to say on this point, for the present I merely point out that the safest plan must depend on the performance of the 2nd & 3rd stages of the journey by men alone

The problem under these circumstances ~~became~~ be stated as follows: —

How can the distance travelled by Shackleton with four men be excelled by employing a greater number.

Calculation on this basis and with S's data brings us within view of the Pole but only by employing 3 units of men

Let us suppose that we start at the bottom of the glacier with 3 units of men each dragging 7 weeks food or 21 food units in all



At B the first party turns back
it will have consumed by return 3 units

At C the second party turns back
it will have consumed 6½ 6 units

At X the last party turns back
it will have consumed 11½ 12 units

Total 21 units

The above allows an abounce of 84 days for the last party for the 2nd + 3rd stages of the journey.

Turning now to the figures derived from S's averages we find that it should take outward 52 days homeward 26 or a total of 78 days to reach & return from the Pole to A.

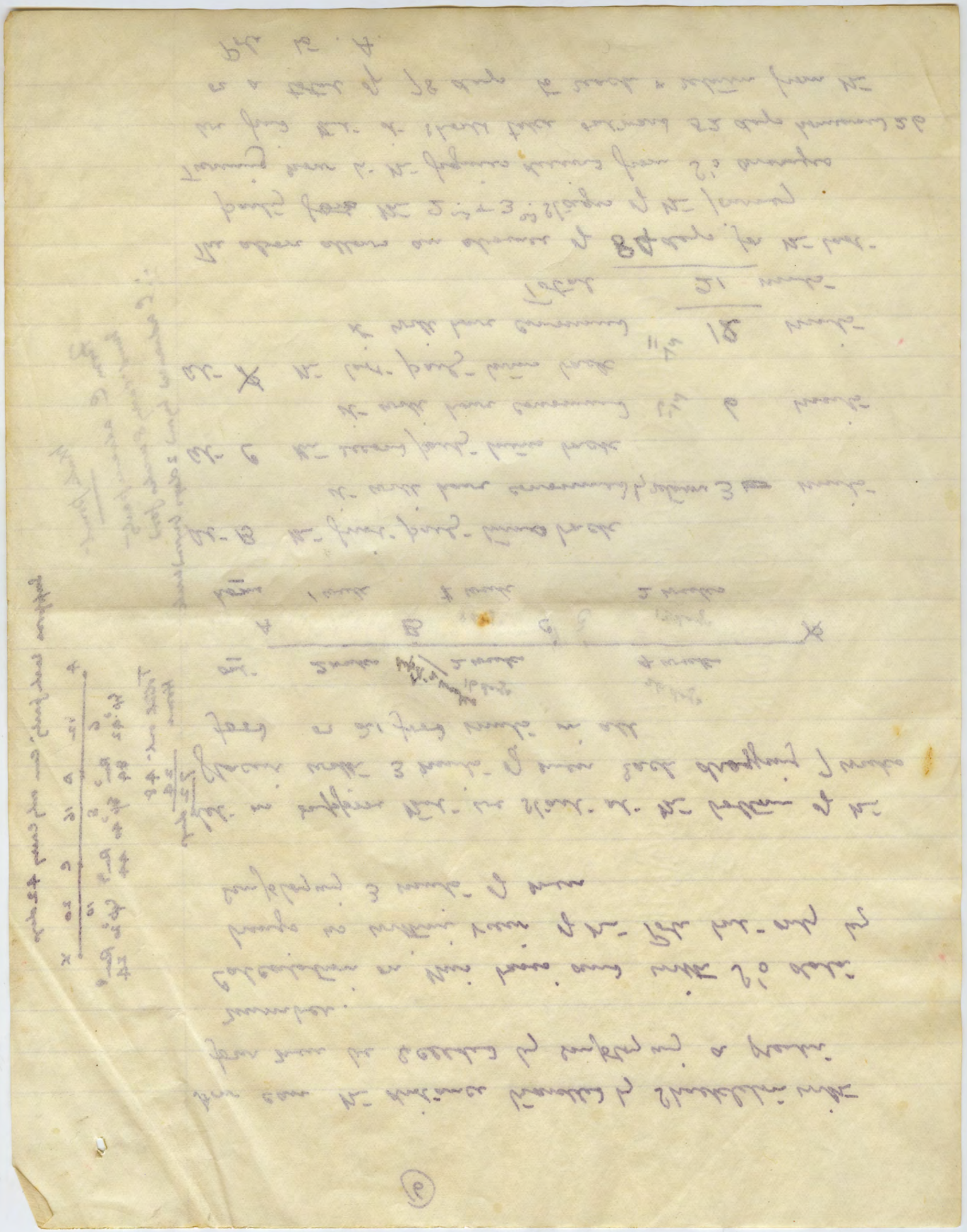
Suppose each party can only carry 42 days

A 12 A 16 C 20 X
6 Rem^d 84 Sp^d 94 S 40 Sp^d 40 Rem^d 44 10 Sp^d 20 Rem^d 24

Total out 48 home 24 / 72 days

Weak point

From C advance party must carry 8 weeks food
∴ C advanced beyond 2 days beyond



On the showing of the figures it is possible therefore for a party to reach the Pole if properly supported by two equal parties

It does not greatly matter ~~to~~ the figures whether each unit consists of 3 or of 4 men

Theoretically units of 3 should be able to go as far as units of 4

But it does make a very considerable difference whether the units are 3 or 4 when we come to consider the 1st stage of the journey which we will now proceed to do

First of all let us calculate the total weights ~~4~~ to be transported ~~food required~~ for the Southern party on a basis of 3 units of 4 men + 3 units of 3 men

From our figures each party will require $8\frac{1}{2}$ food units to reach the glacier + return from it. Total $25\frac{1}{2}$ units

Beyond that point it will require as we have seen 21 units

We have therefore a grand total of $46\frac{1}{2}$ food units

or allowing 70 lbs per unit. ~~total weight~~ for 4 man unit
55 lbs per unit for 3 man unit

We have

	4 man unit	3 man unit
total food weight	3255 lbs.	2557 lbs
add permanent weights at 170 + 120	510 lbs	420 lbs
	3765	2977 lbs.

These would represent the ~~[illegible]~~ mean weights ~~of~~ to be dragged at starting if it were not for our depots
I calculate that owing to these depots we can reduce these starting mean weights by 560 lbs
our figures then become

3205 lbs 2417 lbs

I'm afraid I must again change the subject after making a note of these figures

And now I will consider the means by which these weights will be transported over the first stage

We are confining our considerations at present to what our experience or opinion points to as the most reliable sources of energy under other different conditions. In the case of ~~transport~~ the first stage it must be conceded that the ponies are the most reliable
I shall therefore give some figures for these ponies adopting as before x as I think fair Shackletons figures

I find S's ponies were killed as follows

1st	18 days out	2
2nd	25 days out	3
3rd	28 days out	3
4th	34 days out	2

I assume that we have to kill our ponies as noted marginally

From the above we have obviously the number of pony rations to be provided viz.

36
75
84
72

Total 267

Assuming 13 lbs as a pony's ration we have a total weight of 3471 lbs of pony food

~~Therefore excluding weight of sledges & pony equipment~~
But in this we are again helped by our depôt in regard to starting weights
If took Shackleton 11 days to reach 79½
" " us 13 " " " 79½
We may then allow 12 day " "
If so the ponies will have consumed 12 × 13 × 10 = 1560 lbs
At the depôt we have 1274 lbs.
We can therefore lighten our starting loads by this amount and the pony food at start becomes 2197 lbs.

Therefore exclusive of weight of sledges & pony equipment our starting weights should be

3 units 4 men	3 units 3 men
5402	4614

Assuming that the ponies pull 550 lbs each average we have a traction of 5,500 but can we assume such a figure?

Lastly I doubt if we ought to assume they will pull more than 500lbs in which case it becomes a question of reducing the units to 3 —

Recapitulate —

Dogs : —

These may help us

Motor sledges : —

Know to use on glacier

Point out 9 or 12 men does not mean lots of people employed on journey.

Points for us : —

we have the dogs + motor sledges to help in the first part of the journey

personally also with a large party - help to pull sledges

possibility of being on fuller rations + therefore better able to work on summit - use of skis on homeward journey

against

Increased number increased chance of breakdown

" risk of accident in glacier

" chance of something going wrong with organization which is much more complex

chance of bad season. weather.

greater time on plateau - will men stand it?

Refer to losses in autumn to previous ideas + modification which has necessitated abandonment of subsidiary plans

—

Confidence in Oates in management of ponies

we must not forget the lessons learnt - Advantage of pony snow shoes - prevention of pony snow blinders - instrument for knocking snow off horses - Sandpaper for runners

Spare runners for glacier - hypo attachment to ponies

Finally question of date of return to England.
& Salaries

We have 84 days out wind to Pole

53 - homewards from Pole to depôt

137

7 depôt to Hut Point.

144

3rd Nov to 27th March.

Well answered ✓

Form ✓ 60 Alm

Pupils started no header

header. Header usually

Rule a useful - for

common - pm

Good