6RB
M

Sectt. II-27—39,004—24-10-44.

Edn and P.H (Edn) (1946) Department.

MS SERIES.

①

G.O. No. 259.

Dated 6. 2. 1946.

Order at f/p 16-17 CF

[Despatch Abstract.]

Back Papers.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Further Papers.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

②

Sectt. II-74—20,006—6-10-38.

Department.

C. No.

List of records put up.

Number.	Date.	Department.	Signature of Clerk putting up the paper.	Signature of Clerk removing the paper.

Back Papers.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

12306

R.C.No.97.A/45.

Office of the
Director of Public Instruction,
Madras, Dated 24th March, 1945.

27 MAR 1945
28/3

(3)

From

Dr.B.B.Dey, D.Sc.(Lond.), F.R.I.C.,
Officiating Director of Public Instruction, Madras.

To

The Secretary to Government,
Education and Public Health Department,
Fort St. George, Madras.

Sir,

Sub: College of Engineering, Guindy - Permission to Professor K.Srinivasan to continue his research work and sanction for purchase of some apparatus for the work - Requested.

I have the honour to state that prior to his appointment as Professor of Electrical Engineering in the Engineering College, Guindy, Professor K.Srinivasan was doing some important research work on optimum wireless frequencies, and other essential wireless data, highly useful for military purpose in the Institute of Science, Bangalore. In his D.O.No.039 Sigs. dated 8-2-'45 to the Principal, College of Engineering, Guindy(copy enclosed) Brigadier General G.Taybur of the Southern Army Headquarters spoke highly of the Professor's services to the military and recommended that he might be permitted to continue his research in the College. He has temporarily brought with him on loan from the Institute of Science, Bangalore some apparatus and with the help of the materials available in the College he is able to commence the work. In view of the recommendations of the military authorities and the Principal of the College I have permitted the Professor to continu his research subject to the condition that this work will not interfere with his normal duties in the College. I request that

action..........

p 3 infra
Taylour

Back Papers.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

12306

R.C.No.97.A/45.

Office of the
Director of Public Instruction,
Madras, Dated 24th March, 1945.

(3)

ASST. SECRETARY TO GOVERNMENT
27 MAR 1945
28/3
EDUCATION AND PUBLIC HEALTH DEPT.

From

Dr.B.B.Dey, D.Sc.(Lond.), F.R.I.C.,
Officiating Director of Public Instruction, Madras.

To

The Secretary to Government,
Education and Public Health Department,
Fort St. George, Madras.

Sir,

Sub: College of Engineering, Guindy - Permission to Professor K.Srinivasan to continue his research work and sanction for purchase of some apparatus for the work - Requested.

P 3 infra

Taylour

[illegible]

I have the honour to state that prior to his appointment as Professor of Electrical Engineering in the Engineering College, Guindy, Professor K.Srinivasan was doing some important research work on optimum wireless frequencies and other essential wireless data, highly useful for military purpose in the Institute of Science, Bangalore. In his D.O.No.039 Sigs. dated 8-2-'45 to the Principal, College of Engineering, Guindy (copy enclosed) Brigadier General G.Taybur of the Southern Army Headquarters spoke highly of the Professor's services to the military and recommended that he might be permitted to continue his research in the College. He has temporarily brought with him on loan from the Institute of Science, Bangalore some apparatus and with the help of the materials available in the College he is able to commence the work. In view of the recommendations of the military authorities and the Principal of the College I have permitted the Professor to continue his research subject to the condition that this work will not interfere with his normal duties in the College. I request that

action...........

action may be approved by Government. I submit herewith a copy of the Principal's letter R.C.12/44, dated 14-3-45.

pp5-6 supra

2. The apparatus sent by the Institute of ~~service~~ Science will have to be returned after six months. The Principal, therefore, recommends that sanction may be granted for purchasing the apparatus mentioned below costing about Rs.19,000/- for continuing the research:

1.	Transmitting equipment	Rs.3000
2.	Receiving apparatus	6000
3.	Oscillograph units	6000
4.	Recording camera	2000
5.	Accessories and contingencies	2000
	Total ..	Rs.19000

As pointed out by the Principal the investigation as well as the equipment will be useful for the proposed new course of study in 'Electrical Communication Engineering' in the College. I, therefore request you to be good enough to obtain the sanction of Government to incur an expenditure not exceeding Rs.19,000/- for the purpose of the equipment. No provision exists in the Budget Estimate for 1945-46 for this expenditure. But funds may be provided by reappropriation in that year.

3. As the expenditure is incurred mainly for research work for military purposes it is for the consideration of Government whether the Military department can be asked to pay the full cost or a portion of it. No contribution need be asked for using the services of the Professor as he is expected to do the work without detriment to his regular civil duties and as he has not claimed any extra-remunneration so far.

I have the honour to be
S i r,
Your most obedient Servant,

for DIRECTOR OF PUBLIC INSTRUCTION.

R.R.24/3. Sd 24/3.

3/ (4)

Copy of D.O.No.039 Sigs. dated 8th Feb. 1945 from Brigadier G.Taylour, Headquarters, Southern Army c/o 11, Adv. Base P.O. to Dr. J.J.Rudra, Principal, College of Engineering, Guindy.

"I wish to commend to your notice the name of Professor Srinivasan, of the Institute of Science Bangalore, who, I understand, will shortly become a member of your staff.

For the last three years Mr. Srinivasan has been doing work of the first importance for the Army, in connection with investigation and research regarding optimum wireless frequencies and other essential wireless data.

I am taking the liberty of addressing you in the hope that you will be so kind as to permit him to continue the work on which he has made such an excellent start, and I shall be most grateful if you can see your way to giving him full facilities as regards equipment etc.

I cannot speak too highly neither of the efforts which Mr.Srinivasan has made to help us win the War, nor of the exceptional standard of his abilities. No trouble has been too much for him, no detail too intricate or tiresome. It would be in the nature of a real misfortune should he be prevented from completing his work.

I expect to visit Madras early next month and if I do, I shall have the pleasure of making your acquaintance."

-----oxo---

b

: 2 :

DETAILS OF EQUIPMENT.

1. Transmitting equipment	..	Rs.3,000
2. Receiving apparatus	..	6,000
3. Oscillograph units	..	6,000
4. Recording camera	..	2,000
5. Accessories and contingencies	..	2,000
	Total	Rs19,000

In requesting that the amount of Rs.19,000 may be sanctioned, I would say that this investigation and equipment, will be of great instructional vaue to the students of Electrical Communication Engineering Course, for starting which from July '45. I have already submitted my proposals. As the investigation is of immediate interest to the defence services, it will be possible to obtain the help of the military authorities in the matter of priorities necessary for purchase of equipment.

6. In view of the urgency of the investigation and the time available for purchase of equipment, it is requested that the sanction may please be accorded as soon as possible".

E & P. H. Depr

---oxo---

Memo. No. 12306 C-2 Edn. d/ 22-4-45

~~From the D. P.~~ I. R.c.97.A/45, d/ 24.3.45

Eng. college, Guindy – Research work on optimum Wireless frequencies &c by Sri K. Srinivasan, Prof. of Electrical Eng.

The D. P. I. is requested to ~~verify once~~ again the accuracy of the estimate of the non-recurring cost and also to report whether any and if so what recurring cost will have to be incurred in connection with the research. The question of approving the G. of I. will be ~~approved~~ considered on receipt of the ~~further~~ report required herein.

To the D.P.I.

21.4.45

12.4.45

C

(6)

7

ASST. SECRETARY TO GOVERNMENT
11 JUL 1945
EDUCATION AND PUBLIC HEALTH DEPT.

31517

R.C.No.97 A/45,

Office of the Director of Public Instruction, Madras, dated 10-7-45.

From

Dr. B. B. Dey, D.Sc.(Lond.), F.R.I.C.
Offg. Director of Public Instruction, Madras.

To

The Secretary to Government,
Education & Public Health Department, Madras.

Sir,

Sub: College of Engineering - Guindy - Facilities for Prof. K.Srinivasan to do research work.

Ref: Govt.Memo.No.12306 C.2, Education, dated 22-4-45.

page 6 cf

page 9 infra

I have the honour to state that the Principal, College of Engineering, Guindy in his letter R.C.No.12/44, dated 2-7-45 has given full details regarding the non-recurring and recurring costs involved in allowing Prof. K.Srinivasan to conduct his researches in the College. A copy of the letter is submitted herewith for the information of Government.

I have the honour to be,
Sir,
Your most obedient servant,

10.7.45

for Director of Public Instruction.

TRB.10/7

Sd/ 10/7

High, School, Kollengode.

Instructions to Candidates

Before you begin your answers, fill in the above particulars.

You should enter only your register number on this page and also on the first page.

If you enter your S.S.L. Certificate number or your name or both, your answer-book will not be valued.

Write your answers on **both sides of the paper.**

All rough work must be shown on the lower half of the page. No marks will be given where the working by which the answer has been arrived at is not shown.

Do not write in the margin.

No loose sheets of paper will be allowed in the examination room, and no paper must be detached from the answer-books.

In case additional books are used, fasten all the books together.

The answers of candidates must be legibly written.

Copy of R.C.No.12/44, dated 2-7-1945 from the Principal, College of Engineering, Guindy to the Director of Public Instruction, Madras.

"Sub: College of Engineering, Guindy - facilities for Mr.K. Srinivasan for research work.
Ref: R.C.No.97 A/45, dt 26-4-45 from the D.P.I., Madras.

@@@@

I have examined again in detail the estimate of Rs.19,000 for the non-recurring cost for the radio investigation of Mr. Sreenivasan that I submitted in my letter No.R.C.12/44 of 14-3-45, and find that it does not require any modifications for the following reasons:

2. This figure has been arrived at on the basis of the latest price lists available to us at present and I do not think that there is likely to be any sudden or serious changes in them.

3. Secondly, the estimate includes customs duty at 2½ per cent on the radio part of the goods required for the work, provided that these goods are imported directly from abroad and are not obtained through dealers in India. The normal rate is 40 per cent on radio goods of British Origin and 50 per cent on others. But to help educational institutions in their radio work, the Govt. of India have issued a notification according to which such institutions can obtain a refund of duty in excess of 2½ per cent on producing a certificate from the Director-General of Posts and Telegraphs that the radio goods in question will not be used for broadcast reception.

4. Thirdly, I have already mentioned in my letter of 14th March that the Military Authorities have kindly agreed to supply and erect the necessary antenna masts: the estimate does not therefore include any provision for them.

5. So long as the military authorities supply the masts and erect them and the duty is not in excess of 2½ per cent, the original figure of Rs.19,000 will be a correct estimate of the non-recurring expenditure.

RECURRING EXPENDITURE.

6. ELECTRIC POWER: The power required to operate the apparatus will be of the order of 0.15 to 0.2 K.W. and the cost of it at 1 anna a unit will not exceed Rs.9 a month.

7. OPERATORS: When I wrote my letter of 14th March, Mr.Sreenivasan told me that while still at Bangalore he had requested the military authorities to provide the necessary men to operate the apparatus in regular shifts and that he had been told that they would try to do so. This is why I did not provide in my letter of 14th March for recurring expenditure on this account.

8. If, however, the military authorities on account of the exigencies of the war situation find themselves unable to spare the men, I request that sanction of the Government may kindly be obtained to employ three operators for shift duty. They should be men able to understand how the apparatus works and who can be relied upon for accurate observation and recording of the phenomena; otherwise the observations will be valueless to the military authorities and for scientific purposes. I think men who have passed the Intermediate Examination with Physics, Chemistry and Mathematics will be suitable and suggest a salary of Rs.45/- per month.

9. According to the above the total monthly expenditure on power and on the operators will be

(a) Electricity ...	Rs. 9
(b) Operators (3) each Rs.45	" 135
	Rs. 144

There is no other item of recurring expenditure."

31/7 45/31.7

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E. Edn. Deptt (C)

Letter/Ref No. 12306 C/w-4 Edn. d 31-7-45

Des pd
K.M.
1-8-45

To The Secretary to the Government of India
War ~~Defence~~ Department (Army Branch)
New Delhi
~~(with encl)~~
(with encl)

Sir,

Military - Research work by Prof. K Srinivasan - Facilities at the College of Engineering, Guindy.

p 3 ante

I am directed to forward ~~enclose~~ a copy of D.O. No. 039 Sigs d 8-2-45 from Brigadier G. Taylor ~~Taylor~~ to Dr. J. J. Rudra Principal College of Engineering, Guindy ~~Madras~~ on the subject mentioned above and to state that Prof. Srinivasan has been provisionally permitted ~~by the Principal~~ to continue in the Engg. College, Madras (Guindy), the investigations and researches regarding optimum wireless frequencies and other essential wireless data which he was ~~had been~~ conducting for the

A. 39F

Army in the Indian Institute of Science, Bangalore. It is reported that certain articles of apparatus lent ~~by~~ to Prof. Srinivasan by the Institute have to be returned shortly and ~~that~~ to replace such apparatus. the Principal of the College of Engg has proposed an expenditure of Rs. 19,000. ~~He has also stated that~~ The researches conducted by Prof Srinivasan will involve ~~in~~ a recurring expenditure of Rs. ~~[illegible] per mensem~~ (vide copy of letter enclosed) Rs 2,400 a year. As the research ~~work~~ done by Prof Srinivasan is of ~~first~~ great importance for the Army, this Govt. consider that the expenditure non-recurring and recurring mentioned above ~~should~~ may appropriately be borne by the G. of I. ~~military authorities~~ ~~Army~~. I am directed to ~~find out~~ enquire ~~whether~~ whether the G of I agree ~~to this suggestion~~ ~~with this Govt~~ and, if so, ~~whether the expenditure may be debited direct to the Defence Estimates.~~ G.O.I. have any objection to the expenditure (both recurring and non recurring) being debited direct to the defence services estimates.

	Rs. per year
Cost of elec. current reqd. to operate the apparatus, at Rs. 9/- p.m.	108
Pay of 3 operators at Rs. 45 each p.m.	1,620
Dearness allowance for three at Rs. 18/- each a month	648
	Rs 2,376 or 2,400 round fig.

Copy to the O.P.I. ✓

Cs 19.7.45

20/7/45

21-7-45

Despd 1-8-45

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(9)

No. 3518/459/Sigs/ (a).
Government of India, War Department
(Army Branch).
New Delhi, the 17th September 1945.

To

The Secretary to the Government of Madras,
Education and Public Health Department.

Research work for military by Prof. K. Srinivasan --Facilities at the College of Engineering, Guindy.

Sir,

I am directed to refer to your letter No. 12306.C.45.4.Edn, dated the 31st July 1945 and to say that, in view of the cessation of hostilities with Japan, the Government of India consider it unnecessary to continue the research work proposed by Madras Government. This Department is however grateful for the voluntary work done by Prof. Srinivasan and for the assistance given by Dr. Rudra and it is requested that this Department's thanks may be conveyed to the Professor and Doctor.

I am, Sir,
Your most obedient Servant,

(F. W. Goldie) Lt. Comdr.
Under Secretary to the Government of India.

(O. SHARMA).

42139

14

~~246~~ 2 / 4 ~~588~~ 2/10.

Edn. Dept (C)

College - Guindy - Engg. College. Research work done by Prof. K. Srinivasan. Purchase of apparatus.

From the Govt. of India, War Dept. Army Branch No 3518/459/Sigs./(6) d. 17.9.45 — p. 13 ante

Memo No. 12306 C/45. 5 Edn. d/ 1.10.45 — ibid

A copy of letter from the Govt. of India, ~~Army~~ War Department, Army Branch, cited above, is communicated to the D.P.I. He is requested to convey the thanks of the War Dept. ~~to Dr.~~ to Dr. Rudra and Prof. K. Srinivasan for the voluntary work done by the Prof. and assistance given by the Dr.

2. As the Govt. of India do not want the research work to be continued, the ~~equipment which the Army authorities had originally expected to supply may have to be supplied at the cost of~~ by Prov. Govt. The D.P.I. is requested to urgently report whether this would necessitate an alteration in the non-recurring estimate of Rs. 19,000 furnished with his letter No. 97-A/45 d/ 24-3-45 and if so to furnish revised figures.

MM 27.9.45

OSM 29/9/45

Despd to the D.P.I. 3-10-45 E.A. 4/10.

R.C.NO.97-A/45.

OFFICE OF THE DIRECTOR OF PUBLIC INSTRUCTION, MADRAS, DATED 23-11-45.

(10)

From

Dr. S.R.U.Savoor, M.A., D.Sc., I.E.S.,
Director of Public Instruction, Madras.

To

The Secretary to Government,
Education and Public Health Department.

ASST. SECRETARY TO GOVERNMENT
26 NOV 1945
EDUCATION AND PUBLIC HEALTH DEPT.

53872 — p14 ante — vide below

Sir,

SUB:- College of Engineering - Guindy -Research work done by Professor, K.Srinivasan - Purchase of appratus.

With reference to Government Memorandum No.12306-C/45-5-Edn., dated 1-10-45 I have the honour to submit herewith a copy of letter No.Rc.12/44, dated 12-11-45 from the Principal, College of Engineering, Guindy which explains the need for the continuance of the research with the support of the Government of Madras. As reasearch work has to be encouraged I support the request of the Principal for favourable consideration by Government. The estimate for the non-recurring expenditure is now Rs.22,000/-.

I have the honour to be,
Sir,
Your most obedient servant,

24.11.45
for Director of Public Instruction.

COPY of the letter Rc.No.12/44, dated 12-11-45 of the Principal, College of Engineering, Guindy.

****

Sub:- Facilities for Mr. K.Sreenivasan for research work - College of Engineering, Guindy.

A

As the Army authorities do not want this study of the ionosphere continued, I request that the Government may be pleased to support it and grant the necessary non-recurring and recurring expenditure for it. As this college has now a Department of Electrical communication Engineering, and as radio-wave-travel through the ionosphere is an important subject in the syllabus for this course, it would be highly appropriate and beneficial that this work should be conducted at this college. Further, the data that will be obtained will be of use for those engaged in radio communication including the military authorities and also to students of geophysics interested in the upper atmosphere of the earth.

2. REVISED FIGURE OF NON-RECURRING EXPENDITURE.

pp. 5. 6 ante — p. 9 ante

The estimate of Rs.19000/- for non-recurring expenditure submitted in this office letters Rc.No.12/44, dated 14--3-1945 and 2nd July 1945 will require revision to cover the cost of purchasing and erecting the antenna masts. The materials required will be, poles, copper wire for antennas and feeders, galvanised iron wire for guying the poles, insulators etc. It is estimated that a sum of Rs.3000/- would cover this expenditure and I request that this sum may please be sanctioned in addition to the Rs.19000, for non-recurring expenditure.

24.11.45
for Director of Public Instruction.

KP.23-11.

Sol 23/11

DETAILED STATEMENT FOR THE CONTINGENT CHARGES FOR 1936-37.

No.	Name of Article.	Quantity or Number of articles Purchased.	Cost of each article	Total.	Remarks.
1	2	3	4	5	6
			Rs.a.p.	Rs. a. p.	
	APRIL, 1936.				
1	Cost of two Railway locks (1½ " Size)	2	0 6 0	0 12 0	
2	Postage..	-	-	3 8 6	
				4 4 6	
	MAY 1936.				
1.	Cost of 500 envelopes (oblong & thin)	500	1 14 0 per thousand	0 15 0	
2.	To & fro charges paid to K.Subba-Rao, Peon to go to Muktipalli to hand over an urgent letter regarding Financial Statement written by the Headmasters to Mr.Bys.Kumaracharyulu (writer)			2 10 0	
3.	Cost of a book of Railway concession Ticket forms:-	1 book.	0 4 0	0 4 0	
4.	Postage...			5 7 3	
				9 4 3	
	JUNE, 1936.				
1.	Cost of six brooms..	6	0 2 0	0 12 0	
2.	Cost of the following got from Addison & Co., Madras...				
	Pupil's attendance Registers (300 pages each)	2	9 0 0	18 0 0	
	Register of Admission & withdrawls)	1	4 4 0	4 4 0	
	Teacher's attendance Register.	1	2 0 0	2 0 0	
	Registration Charges..	-	-	0 4 0	
	Conveyance Charges...	-	-	0 2 0	
	V.P.M.O. fee..	-	-	0 4 0	
	Railway freight for the above parcel..	-	-	~~1-6-0~~ ~~0 1 6~~	
3.	Cost of the following articles Purchased:-				
	Pots..	2	0 7 0	0 14 0	
	Jugs..	2	0 2 6	0 5 0	
	Lids for pots..	4	0 0 6	0 2 0	
	Pot rests..	4	0 0 6	0 2 0	
	Balance pole strings.(1set)	1set	0 3 0	0 3 0	
	Cooli--	-	-	0 1 0	
4.	To & from Jutka charges including waiting charges for the Headmaster to ~~the~~ go to the President.			0 10 0	
5.	Congratulatory Telegram to His Excellency the Governor of Madras, on the birth day of his Majesty King Edward VIII				

2-10-0
2-0-0
2-10-0
7-4-0

15

EPH OGPH
C

16

(11)

C.No 12306 C/45.

~~[illegible] College of~~ college - Engineering. Guindy - Research work by Prof. K. Srinivasan - Approved. Purchase of apparatus - Sanctioned.

p15 c.f. From the D.P.I. Rc No 97.A/45 of 23.11.45

Order Ms 259. Edn of 6/2/46.

pp1-2 c.f. The Govt approve the action of the D.P.I in having permitted Sri K. Srinivasan, Professor of Electrical Engineering, College of Engineering, Guindy, to continue at the College the research work on optimum wireless frequencies and other wireless data which he was doing in the Indian Institute of Science, Bangalore on behalf of the Military authorities before he joined duty in the Engineering College.

p7 N.F. 2. The Govt sanction ~~[illegible]~~ the employment, for a period of one year, of three shift operators on Rs 45 p.m. plus dearness

17

allowance, and the recurring of an expenditure of Rs 9 p.m. on electricity charges. They also sanction an expenditure not exceeding Rs 22,000 (Rs twentytwo thousand) in the current year on the purchase of the equipment required for the research work. The expenditure will be debited to "37 d. Education - University - Govt Professional Colleges - B. Engineering Colleges - 4. Other charges."

p 7 r.f.

3. The A.G. is requested to admit the expenditure in audit pending provision of funds. ⊗

5/2/46.

5/2/46

6/2/46.

To
The D.P.I.
A.G. Mdrs. Inf.

Rd. 6/2/46

⊗ Funds have since been provided. G.O. 829 Edn. 12

A (12) 18

C.F. 32 (a).

Education Department

From (Name) Dr. S. R. U. Savoor, M.A., D.Sc., I.E.S.,
Designation Director of Public Instruction,
Station Madras.

Received .... Registered ....

To
The Secretary to the Government of Madras, Education and Public Health Department, Fort St. George, Madras.

Enclosures: R. C. No. 97-A/45. dated 23rd April, 1946.

ASST. SECRETARY TO GOVERNMENT
26 APR 1946
EDUCATION AND PUBLIC HEALTH DEPT.

22435

Sir,

Engineering College, Guindy--Research work by Professor Srinivasan--Expenditure on purchase of equipment--Orders requested.

R 16-17 ct

In G.O.No. 259-Education dated 6.2.1946 Government sanctioned an expenditure of Rs. 22,000/- in 1945-46 for the purchase of equipment to enable Prof. K. Srinivasan to continue his research work in the Engineering College, Guindy. As the required apparatus had to come from abroad it was not possible to spend any amount in 1945-46. It is now proposed to purchase articles worth Rs. 12,000/-(List enclosed)in the current year. I request that Government may be pleased to sanction the expenditure of Rs. 12,000/- (Rupees twelve thousands) in 1946-47. Necessary funds will be provided by reappropriation in due course. The Principal reports that the balance of Rs. 10,000/- will be spent in 1947-48 as all the articles have to be imported from abroad.

P.T.O.

19

: 2 :

2. I request the favour of early orders.

24.4.46

For Director of Public Instruction.

ks. 24-4.

List of Stores.

1.	Radio Receivers	Rs. 3,600/-
2.	Cathode Ray Oscellographs	2,100/-
3.	Absorption wave meter	650/-
4.	Recording Film Camera	1,550/-
5.	Transmitting tubes.	200/-
6.	Antenna masts.	3,000/-
7.	Antenna and Feeder Wire.	280/-
8.	Insulators, poles, cross arms etc.	250/-
9.	Consumable Stores.	300/-
		Rs. 11,930/-
		or
		Rs. 12,000/-.

24.4.46

FOR DIRECTOR OF PUBLIC INSTRUCTION.

Sd
24/4

~~20~~

Education and Public Health (A)

(13)

AA 86 Ec
13/5

Sub: College-Engineering, Guindy-Research work by Professor Srinivasan-Purchase of equipment

****

Q/16-17
CF

p1 CF

Read again. G.O. No. 259 Education, dated 6-2-46.
From the Director of Public Instruction, R.C.No. 97-A/45
dated 23-4-45.

****

MEMO. No. 22435 A/46-2 Education dated. 10-5-46

-:0:-

ASST. SECRETARY TO GOVERNMENT
11 MAY 1946
FINANCE DEPARTMENT

The Government sanction the purchase during 1946-47 of the stores required ~~requested~~ for the Research work on Optimum Wireless frequencies in the Engineering College, Guindy and specified in the list sent with the letter of the Director of Public Instruction read above, at a cost not exceeding Rs. 12,000 (Rupees Twelve thousand only).

p2 CF

2 The expenditure should be debited to the head "37-d. Education-University-Govt Arts College 13 Engg college-4 other charges"

3 ~~2~~. The Accountant General is requested to admit the expenditure in audit pending the provision of funds.

ASST. SECRETARY TO GOVERNMENT
8 - MAY 1946
27450
FINANCE DEPARTMENT

6/5/46

NOTE:- Finance U.O. for acceptance.

6/5/46 5/7 9/5/46

TO
The D.P.I.
The A.G. thro' Finance. (with copy of letter)

22435 A/46-1
8/5/46

~~2~~ 21

A

Finance (Sect. A).

The draft order overleaf may be accepted subject to the addition indicated in pencil.

9.5.46

CSH
8.5.46

DW
8/5/46.

E. P. H.

ASST. SECRETARY TO GOVERNMENT
18 MAY 1946
EDUCATION AND PUBLIC HEALTH DEPT.

Fin. No. 27450 A A I
9.5.46

Issue as amended

ASST. SECRETARY TO GOVERNMENT
10 MAY 1946
EDUCATION AND PUBLIC HEALTH DEPT.

10/5/46

25198

A

Telephonic Message (By Post) dated 16-8-1946.

From the Director of Public Instruction, Madras.

(14)

ASST. SECRETARY TO GOVERNMENT
22 AUG 1946
EDUCATION AND PUBLIC HEALTH DEPT.

To the Assistant Secretary to Government,
Education and Public Health Department, Madras.

(a) | p. 16-17 cf

(a) | p. 20 cf

Ref: G.O.259 Edn., dated 6-2-1946 and Memo 22435 A/46-2 Edn., dated 10-5-1946 regarding sanction of funds for the research work by Prof. Srinivasan.

The expenditure sanctioned for the research work is debitable to the head "37 Education - University - Government Professional Colleges - (d) - B.3 - Workshop maintenance - Authorised - Apparatus and materials". The debit-head in the Govt. Memo quoted above is noted as "37-(d) Edn., - University - Government Professional Colleges - (d) Engineering College - 4. other charges". Necessary correction may kindly be issued.

19.8.46

for Director of Public Instruction.

47961

k.h.19-8.

Sd
19/8

E&PH(A)

116/3/9

Memo. No. 47961 A/46-2 Edn d/ 2-9-46

⑮

College - Engg, Guindy - Research work by Prof. Srinivasan - purchase of equipment

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CF

From the DPI, T.M (by post) d/ 16-8-46

The expns on the purchase of the Stores for the research work on Optimum Wireless frequencies in the College of Engg, Guindy Sanctioned in Govt. Memo. No. 22435 A/46-2 Edn d/ 10-5-46. Should be debited to, " 37.d.- Education University - Govt Professional Colleges - B. Engineering Colleges - 3. Workshop maintenance - Authorised Apparatus and materials for workshop " instead of to the head mentioned in the Memo.

To The DPI

A G thro Fin

28/8/46 28/8/46

28/8/46

P.T.O.

Note Finance may see before issue.

ES 28/8/46 B 28/8/46

BPM 28/8/46

Finance

[To be added to @ after issue]

Edn u.o 47911 A/46-1 28-8-46

Fin (Expr)

The draft memo (overleaf) is accepted in Fin

Fin Kr 31/8/46

ESPH

ASSISTANT SECRETARY FINANCE DEPARTMENT 31 AUG 1946 46904 Exp.C

ASST. SECRETARY TO GOVERNMENT EDUCATION AND PUBLIC HEALTH DEPT. 2 SEP 1946 50417

Fin u.o. 46904 Exp.C-1 31/8/46.

BPM 2/9/46

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(16)

1

Ed & P.H. Deptt

C 12306 From the D.P.I., R.C. No. 97 A/C/45 d 24.3.45

College – Engineering – Research work by Profr Srinivasan – Purchase of apparatus.

pp 1-2 cf

The action of the D.P.I. in having permitted Mr. K. Srinivasan, Profr of Electrical Engineering, Engineering College, Guindy, to continue, the ~~his~~ research work ~~at the College may be approved~~ which he was doing at the Indian Institute of Science, Bangalore, at the Engineering College, may be approved. The purchase of equipment may also be sanctioned. Draft order is submitted. It may be sent to Pub (War) and Finance for acceptance.

p 2 cf

2 As stated by the Director the research is intended mainly for military purposes. The Defence deptt should be asked to pay the cost of the equipment. ~~Pub (War) may take necessary action in this regard~~. The question of opening the new course of study in Electrical Communication Eng: in the College has not yet been decided ~~is still under consideration~~ Detailed proposals are awaited from D.P.I. It cannot ~~and the new course may not~~ be opened from July next. Public (War) may take necessary action in regard to the recovery of the cost of the equipment from the Defence Dept

p 2 cf

ASST. SECRETARY TO GOVERNMENT FINANCE DEPARTMENT 10 APR 1945

Ach 5.4.45

17759

now be said whether the course will

If Pub: so desire, Ed P.H. will draft by proposals in the first instance

9.4.45

Fin / Pub

Finance(Accts.A)

No. 12306 C 9.4.45

Ed P.H. have stated that the question of opening the new course of study in Electrical Communication Engineering'

2

in the Engineering College, Guindy, has not yet been decided and that it cannot now be said whether the course will be opened from July next. As the equipment is required mainly for research work for Military purposes, it seems that the Defence Department should be asked to meet the cost of the equipment. Finance may therefore suggest that before sanctioning the expenditure of Rs.19,000 on the purchase of the equipment, the consent of the Defence Department may be obtained. Usually the Military authorities refuse to ~~bear~~ shoulder any responsibility when once ~~the~~ any expenditure ~~is~~ has been sanctioned by this Government.

Para 3 on p. 2 CF

Cf para 2

Dwd

2. It ~~does~~ is not ~~appear that~~ clear whether similar expenditure on the purchase of equipment for research work for Military purposes has been incurred in the past. The extra cost involved is also large. The proposal in the present case will therefore have to be treated as a 'New service'. E.& P.H. may be requested to obtain orders in full circulation and also H.E's ~~xxx~~ authorisation for a supplementary estimate of expenditure in due course.

This may be considered after ascertaining whether the Army will bear the full cost & whether it can be debited direct to the Defence Estimates.
Dwd

The Military authorities may first be asked to state if they ~~[illegible]~~ would meet the full cost. If they do not agree, the ~~[illegible]~~ question may be considered later whether this Govt. should incur any expenditure.

It is presumed that there will be no recurring expenditure to be incurred. If there is any, the Military will have to bear the cost. This may perhaps be definitely ascertained, before the Military authorities are addressed.

12.4.45

A.S.I
Pub. (War)

13.4.45

I agree with A.S.I
Dwd
14.4.45

Pub. (War)

Fin. no.
17759 Accts A1
16/4/45

Public (War) Dept.

May be perused and returned to Edn. & P.H. That dept may address the military authorities or the Govt of India direct regarding the recovery of cost in this case as it is

UNDER SECRETARY
16710
16 APR 1945
PUBLIC DEPARTMENT

16/4/45

3

(17)

not necessary that such references should issue from this Dept.

16/4/45

This Dept. may agree that there is a case for addressing the Defence Dept. to bear the cost in view of what is stated in the Brigadier's letter on p. 3 cf also at 'B' on p. 5 cf. The reference may be made direct by E & P.H.

17.4.45

ASST. SECRETARY TO GOVERNMENT
APR 1945
EDUCATION AND PUBLIC HEALTH DEPT.

16021

17/4/45

C.S.

18/4/45

E & P.H.

Pub War E
No 16710/45-1
18/4/45

E & P.H. Dept

Submitted for orders. The proposal

Cover
19.4.45
18/4/45

21.4.45

22.4.45

(Issued as memo no. 12306 C.2 d/ 22.4.45)

page 6 CF

C.No. 31517 C/45

From the Director of Public Instruction, Rc. No 97 A/45 d/ 10/7/45

The D.P.I. has submitted a letter from the Principal of the Engg. College, Guindy, ~~[illegible]~~ which contains an estimate of the cost involved in the radio investigations conducted by Sri Srinivasan on behalf of the military authorities. The investigations ~~[illegible]~~ entail ~~an occurring~~ an expenditure of Rs. 144/- (recurring) and ~~a non recurring expenditure~~ Rs. 19,000 non-recurring. The military authorities ~~Defence Dept~~ Govt of India may now be addressed. A draft letter to ~~[illegible]~~ is subd. Public (War) Finance, may see ~~[illegible]~~ before circulation.

19.7.45
20/7/45

P on p. 9 c.f.

It is not ~~[illegible]~~ clear whether the estimate of recurring cost Rs 172-8 (Rs 144 & 22) will be found adequate in practice: it provides for 3 shift operators on Rs 45 a month. Shift operators in the Power House of the Engg. College are in the scale of Rs 70 - 5/2 - 90. The Principal has proposed a pay of Rs 45 in this case, apparently [illegible]

4

What is the laboratory? A ~~[illegible]~~ Battery room attender in the college is in the scale of Rs 35-1/2-50. Taking that into account, Rs 45 is perhaps sufficient but better to provide dearness allowance also. If that is done, estimate will be Rs 2,376 or Rs 2,400 in round figures & it may be adopted. Draft amended.

18 × 3 × 12
= 648

Q

S
21.7.45

S
21/7/45

Finance u.o. 12306 C/45-3 E & PH d/ 23/7/45

Fin (Accts A)

Please see previous Fin note on pp 1-2 above and notes following

The draft letter below may be accepted subject to the slight additions indicated in pencil there. ~~[illegible]~~

G.S.
26.7.45 ~~[illegible]~~

KRV
27.7.45

D
27.7.45

E.P.H.

Fin U.O. 34016 Accts A.1
27.7.45.

34016

ASST. SECRETARY TO GOVERNMENT
25 JUL 1945
FINANCE DEPARTMENT

E & P. H

For orders as to issue of draft as it is.

S
28.7.45

S
30/7/45
A2

/45

ASST. SECRETARY TO GOVERNMENT
28 JUL 1945
EDUCATION AND PUBLIC HEALTH DEPT.

OS
30/7

[Letter No 12306 C/45-4 E & PH d/ 31.7.45]

34100 – pp 11-12 cf

From the Secy. to the Govt. of India, War Dept. No 3578/659 Sigs. (a) d/ 17.9.45.

pp 13-cf.

Please see the letter from the Govt. of India on p. 13 cf.

Since that Govt. consider it unnecessary to continue the research work done by Prof. Srinivasan, the equipment etc. referred to on p. 2 cf. will have to be purchased entirely from Provincial funds, as they are reported to be useful for the Electrical Communication Engineering course recently started at the Engg. College, Guindy. The aerial masts which the Army Dept. originally agreed to supply, will have to be supplied now at Govt. cost and this may result in an increase in the non-recurring expenditure of Rs. 19,000. The DPI may be consulted about this. A draft om. is submitted.

pp. put up in another file

'A' on p. 5 cf.

p. 2 cf.

OM
29/9/45 S

for approval on p. 14 cf.

MM
27.9.45

OM
29/9/45

1/10/45

5

(18)

[Memo No 12306 C/45-5 E & PH d/ 1.10.45]

p 14 cf
p 15 cf

From the DPI. No Rc. 97-A/45 d/ 23.11.45.

Please see the DPI's letter and its enclosure on p. 15 cf. The estimate for non-recurring expenditure has been increased from Rs. 19,000 to Rs 22,000 including the cost of the aerial masts etc. As the research work will be useful for the Electrical Communication Engineering course this dept. may support the Director's proposal for the continuance of the research work and for incurring a non-recurring expenditure of Rs. 22,000 on the purchase of apparatus and materials and a recurring expenditure of Rs. 2,400 per annum. The file may be sent to Fin. u.o. for remarks.

A 'Q' on p. 4 ante

MM
18/12/45

22/12/45

27

OM
28/12/45 S

4/1/46

U.O. 12306 C-6
3.1.46

ASST. SECRETARY TO GOVT.
8 JAN 1946
FINANCE

Finance (Accts.A) Dept.

Previous Finance notes on page 4 above.

Please see the notes of the E & P.H. Department on pages 4-5 above.

p 13 cf

The Government of India have stated that in view of the cessation of hostilities with Japan they consider it unnecessary to continue the research work.

Accts A
425 AA

The Principal, Engineering College, however, now states that the Government may support it and grant the necessary funds, as the college has now a Department of Electrical Communications Engineering and as radio wave travel through the ionosphere is an important subject in the syllabus for this course and as it would be highly appropriate and beneficial if this work should be conducted at this college. He also states that the data that will be obtained will be of use for those engaged in radio communications including the Military authorities and also to students of Geophysics.

A on P15 CF

The Director of Public Instruction supports the proposal and E & P.H. also agree.

P15 CF

The estimate of expenditure is as shown below:-

Non-recurring	...	22,000
Recurring	...	2,400

A on P 5 above

The following remarks are called for:-

General:- The research work on wireless frequencies etc., was originally undertaken by Professor Srinivasan at the Institute of Science, Bangalore, on ~~bahelf~~ behalf of the ~~Military~~ War Dept., as it was considered highly beneficial for military purposes. ~~and~~ On his transfer to the Engineering College at Madras, the Military authorities recommended that he might be permitted to continue his research work at the Engineering college. ~~It was not then stated that the research work was necessary or would be useful for the courses of study at the Engineering College, Madras also.~~ Now the Government of India having stated that the research work is unnecessary for their needs, the Principal, Engineering College ~~apparently puts in as a plea for~~ recommends the incurring of the the expenditure from Provincial funds, on the ground that the research work would be beneficial to the Electrical communication courses at the college. The Director of Public Instruction however does not say anything about this aspect, but merely supports the proposal on the ground that the research work should be encouraged.

P 1 CF

P 3 CF

P 13 CF

P 15 CF

Research work required for the efficient working of the college courses is one thing, and general research work is quite a different thing. Items of extra research work not directly connected with the college courses would seem to be in the nature of work to be undertaken by research Departments of the University or the Institute of Science at Bangalore.

In the circumstances it is for consideration whether this Department should agree to the proposal to incur expenditure on research work from Provincial funds.

Please see below
6.1.46

If the proposal is to be accepted, the following remarks are called for on the details:-

(1) Non recurring 22,000

The details are:-

~~1. Transmitting equipment. Rs.3000~~

1.	Transmitting equipment.	Rs.3000
2.	Receiving apparatus	6000
3.	Oscillograph units	6000
4.	Recording camera	2000
5.	Accessories and contingencies	2000
6.	Cost of purchasing and erecting undiana masts.	3000
	Total.	22000

P 2 CF

6.1.46
DWD

It is stated that the estimate has been arrived at on the basis of the latest ~~proposals~~ price lists available. May be accepted.

(2) Recurring:- Rs.2400 p.a.

	Per annum
(a) Electricity Charges at Rs.9/- per mensem	108
(b) 3 shift operators at Rs.45/- pm plus dearness allowance.	2268
	2376 or 2400

3×45+18=63
189×12

P 9 CF

6.1.46
DWD

Item (a) above:- May be accepted.

Item (b) above:- It has not been stated ~~as to~~ for what period, the research work is proposed to be continued. For the present, this Department may suggest that the sanction may be given for the employment of 3 shift operators on Rs.45/- per mensem plus dearness allowance for a period of one year.

6.1.46
cf A on P 4 above
DWD

Funds:- As the extra cost involved is large, i.e. Rs.22,000/-, and as it exceeds the limit of 10,000 for non-recurring expenditure, the proposal will have to be treated as on a 'new service'. E & P.H. may be requested to obtain orders in full circulation and also H.E's authorisation for a supplementary expenditure in due course.

Yes; as it is expenditure on a new experiment
6.1.46
DWD

4.1.46
4.1.46
Shri: EI
re: (b) above.

4.1.46

Prof. Srinivasan's experiments are ~~to~~ evidently ~~very~~ valuable and it will not be desirable to discontinue them though the Military are unreasonable in refusing to bear the cost. The proposals of the D.P.I. need not be objected to in this Dept, though the cost is large. Orders of the Govt. may be taken in circulation.
6.1.46

7.1.46.

DWD
7.1.46
E.P.H.

File no. 425 AA-1
7.1.46.

Edn and P.H. Dept
C

XX while he was employed in the Indian Institute of Science, Bangalore, Sri R. Srinivasan, Professor of Electrical Engineering, College of Eng., Guindy, was

ASST. SECRETARY TO GOVERNMENT
1258
8 JAN 1946
EDUCATION AND PUBLIC HEALTH DEPT.

8/ doing research work on optimum wireless frequencies and other wireless data on behalf of the Military authorities. After joining the Eng: college Prof. Srinivasan continued the research. As the war is over the Military authorities state that the research work is unnecessary for their needs. Both the Principal of the Eng: college and the D.P.I recommend that the research work may be continued and the cost met from Provincial funds, as it would be beneficial to the Electrical Communications course which has been recently started in the college. Edn and P.H. support the proposal: Finance have no objection to it; ~~[illegible]~~. The extra cost is Rs 22,000 (Non-recurring) and Rs 2400 (recurring)

For orders whether the staff proposed may be sanctioned for one year as suggested by Finance /W/

The file may be circulated.

p 13 cf

p 15 cf

p 7 ante

18/1/46.

20/1/46 S

21/1/46

O.O. 23/1

A2. A1. Au. A3. HE

May be approved

21/1/46

21.1.46

25.1.46

29/1/46

W / Orders may issue the file recirculated f post approval 2/2/46

A3

HE

O.O. 7/2

A draft order is submitted for approval. After issue the file may be circulated to H.E. for post approval. [A note for a supplementary estimate of expenditure will be submitted in due course.]

Action later

4.2.46

5/2/46.

5/2/46 S

6/2/46

HE - Ack. issue.x

x Issued

AH. 10/2/46

MADRAS GOVERNOR'S SECRETARIAT
31 JAN 1946
648

MILITARY, EDN. AND P. H. DEPT.
4 - FEB 1946
GOVERNMENT OF MADRAS

MADRAS GOVERNOR'S SECRETARIAT
7 FEB 1946
812

MILITARY, EDN. AND P. H. DEPT.
12 FEB 1946
GOVERNMENT OF MADRAS