

PSA  
Book #1 <sup>should be</sup> a part of Chapter 7 - ~~2000-2019~~  
PSA office

27/3/2018

Chapter 7 - (A part)

Today morning around 8:30 am  
Dr. K. Radhakrishnan, former Chairman ISRO  
called me and informed me about  
Dr. Vijayaraghavan (outgoing Secy DBT  
- who had been extended a few  
times upto their own self imposed  
limit for extensions... varying  
from time-to-time!) has been  
appointed as PSA to GOI and he  
had confirmed.

Then I was suggesting (KR - who  
also once hoped for that position!)

\*KR that he should start popular  
writing (fortnightly) on ~~In~~ Planets,  
Moon, Asteroids as he had captured  
the popular mind as Mars Man....

This is a type of interaction we have

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had many times - when he was Chairman ISRO (for post-Chairman plan) and more later. . . . KR said that

R. Chidambaram had laid down office after 16 years. I corrected

it was from Nov 2001 - it is now 16 1/2 years. <sup>Almost everybody commented</sup> ~~with very~~

~~little to~~ ~~even~~ during the past 4 years (esp. after change in Govt) that he had done precious little.

So how much Vijayaraghava will do, is a question mark. He may continue some funding. Also

Chairman.

Any other matters with the permission of the

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some reports ... and of course talks. He will be busy also with selection / extension of very senior persons in S&T. Makes it powerful!

To use four Members Finance (MF) V. V. Bhat, these positions are filled up by "convenient Brahmins" GOI needs them, he would add laughingly.

My ~~own~~

All these were going on in my mind... That is an office PSA office - which was built practically single handedly by me, of course around Kalam, mainly to take care of his ~~post~~<sup>~69</sup> post SA to PM a life! .. But still I had hope

(@2000) some thing can be done when some strong <sup>...</sup> ~~with~~ power <sup>was</sup> ~~is~~ available to back up action plans. It was not possible in DST as TIFAC had to be dependent on ~~D'~~ Secy DST whose priorities were diffused - more governed by those who were in SAC - to PM and later those same persons sitting in Chair for many programmes such as CNR. Rao and his "team mates". The irony of ~~the~~ the positions of Secy DST, Secy DSIR, Secy DBT etc was that they had to be in the "good books" of the ~~the~~ Extra-Cos' Extra Constitutional Authorities of Science hierarchy - MGK... lost out quite a bit after 1991 when he ~~stepped~~ lost the position of

MOS(S&T) in VPSingh's Ministry though he continued as Rajya Sabha Member.

He used his limited powers to take care of Dr. Manu Sharma's elevation to Secy DBT, over a series of dexterous moves, even using the 13-day tenure of Vajpayee's govt, using the route of <sup>then</sup> Principal Secy in PM's office Mr. Tandon (brother of Dr. PN Tandon - a staunch MGR loyalist, but later got into CNR Rao group and also getting some of his own para-territory in HRD for creating ~~the~~ troubles for Deemed Universities!

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Even though during 1991 + years  
1991-1995 when PV Narasimha  
Rao was in power SAC-PM  
non-existence since 1990 - the  
~~second~~ <sup>third</sup> extension after  
1986-88, 1988-90  
tenures was scuttled by MGK  
Memon as ~~Min.~~ MOS(S&T).

Still CNR floated around as he  
had captured many powerful  
Chairpersons in DST - Long Term  
Indo-Russian Coopn., Japan etc and also  
started building JNCR with huge  
funds - commanded winding down  
money of super conductivity. ~~At~~ <sup>As</sup> ~~since~~  
all he had full control on ~~it~~.

Dr. P. Rama Rao, the Secy DST who was brought in by usurping Dr. V R G who was 58 yrs only and had 60 years of retirement age due to ISRO.....

Dr. V. S. Arunachalam (VSA) who was a ~~rising star~~ <sup>rising star</sup> of in "Science - boss - dom" especially during Rajiv Gandhi days ~~there~~ (the boss of missile man Kalam) left the scene due to pressures from the <sup>chief</sup> forces ~~at~~ which was primarily due to the inability of DRDO ~~to~~ for which he got through ~~some~~ so many

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Missiles, LCA etc. He also got  
for DRDO Scientists the "Review Promotion"  
as in DAE & ISRO. Unlike the  
situation of MGR & CNR who did  
not have any thing to deliver  
but could control ~~the~~ top S&T  
persons & money flow from S&T  
departments through various  
extra-constitutional committees &  
perceptions of being senior, VSA  
had direct delivery at <sup>his</sup> hand. In  
addition he inherited many  
since of the past of DRDO  
like ~~Vijay~~ Arjun tank! In  
the S&T power politics those who

had visible delivery could not  
get out of their narrow territory  
~~for~~ (though big in money) for  
"national level" command, control  
& manipulation" of S&T & academic  
system. Only free lancers having  
at best some institutions ~~are~~ like IISc  
which will run on its own ~~or~~  
could wield the "national para".  
In a way it was "akin" to  
national political system: those  
who are CM's of the ~~Sat~~ States  
<sup>for long</sup> rarely get to become PM (Modi  
an ~~of~~ exception). ~~They~~ State level  
persons with ambitions had to

move to Delhi even as junior minister & rise!

In S&T system DST provides such a play ground. "Paraphernalia distribution-positions" had to be captured but without responsibility of delivery! If there are problems it was Fey DST who had to answer. So was DBT.

DSTR was almost an in house affair — but gave these ~~sciences~~ "Science po-boss - aspirants" to ~~use~~ ~~the~~ human resources to unite reports — that is the route Dr. Mashelkar used

to help ~~SAC-PR~~ CNR, enter  
into SAc to PM etc.

So the departments of  
S&T DST, DSIR, DBT, DNES, DOD  
later Earth Commission,  
DOE (later got into different league)  
DO Env. ( " )

ICAR (mostly internationalises),  
~~DOD (later all became a~~  
~~(ocean)~~ good playground for ~~#~~ " Science  
Polities). Then later three

& even DNES was out of their reach  
being taken by IAS, (ICAR was  
unattractive!)

So DST, DBT, DOD, DSIR  
had Seey's carefully picked up

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by these "Extra-Constitutional Stalwarts"  
Using that they entered into  
Academic systems also as they  
gained some say in selection of  
IIT Directors (SET - and therefore  
IIT was close!) Legy's of  
SET departments ~~post-ext~~  
post-serial-extensions could  
hope for Chairmanship of  
IIT's! ~~and now being taken~~  
~~away~~ Odmy

So in the transition from  
P. Rama Rao ~~to~~ ~~at~~ next person  
~~things~~ pursue equations between  
MGR, CNR & VSA had changed.

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Since VSA was away from 1992 in USA his "purna in the Delhi S&T - purna-dom" had considerably come down. He could not be a king maker. He could not even protect or of his protegee P. Rama Rao in continuing with DST as Secy till 60 years... He had to suffer the same "humiliation" of going back to DRDO, the "humiliation" inflicted on VRA by his "promoters" to get him as Secy DST. He had to be under Kalam - who was put there by VSA. ~~As~~ As per the original orders - Kalam was

② SA to RM for the two years

VSA was going to USA as a  
Visiting Prof of CMU. (1992-1994)

Any way Kalam also had  
already crossed 60 years (He was  
~~to~~ 61 when he became SA to RM  
and his <sup>(Kalam's)</sup> extension of three years  
got specially by VSA in 1991  
— he was powerful then! —  
was for 3 years ending Oct 1994.

MGR was ~~not~~ weak by  
then in Delhi — His Janata Dal  
Rajya Sabha membership was  
in doubt ending. He switched to BJP also

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He was pragmatic just to take care of Dr Manju Sharma, whom he managed to place Addl. Secy by then & straight from Director Position (2 or 3 jumps). ~~He was~~ ~~continuing~~ ~~as~~ ~~Member~~ He had to hide his time. His protege Dr. S. Ramachandran as Secy DST did ~~not~~ ~~was~~ ~~not~~ <sup>with expectation</sup> ~~getting~~ extension....  
He could ~~not~~ not manage it. ...

P. Rama Rao ~~was~~ when he came in 1991 had a confluence of three support — MAK, VSA & CNR (as he had inducted him as member of SAC - to PM, which

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would have been mostly due to  
the power of VSA then dip 1986 - 88  
when he was at peak with Rajiv Gandhi,  
Arun Singh <sup>Mos Defn</sup> etc

That is why P. Ramakao  
went out of way to support VSA  
going out and the whole of UNDP  
project having considerable budgetary  
support by DST!

~~Since~~ <sup>Through</sup> CNR was out of  
SAe-t-PM from 1990 - he was  
still having residency power in Delhi  
bureaucratic circles in having  
"scientists committee" for selection  
of Secy's of SET departments. The

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IAS bureaucracy was very clever in making use of these "extra constitutional para-bosses". ~~It~~ No body will grumble at them. & "Oh! they are selected by eminent scientists!"

Kalam did not try to help ~~me~~ me during the transition though he was powerful enough within DRDO to do so.

He had access to PVM (PM)  
And I had 7 years as Addl Secy

But he would have been ~~after~~ ~~a~~ ~~year~~ to ~~disrupt~~ ~~the~~ ~~comfort~~ the "Science Bosses", leaving them to their territories.

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He had no such great roots with those types of ~~SR~~ community or Academia as it was with VSA.

Though he was elected as President of INAE, & the academic SR persons who would be ~~with~~ going around "Science Bosses" & Secy DST ~~dit~~ would not treat him as a "great" an "eminent scientist". But DRDO ~~gave~~ gave lots of grants - in-aid to IIT, IISc & a number of Universities, CSIR - labs like NAL - substantial money.

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So it was almost an automatic "election" to have DRDO chiefs, DST chiefs — as President INAE,<sup>§</sup> which should normally be ~~but~~ kept for active, veteran academics!

~~So far~~ So much about the "pragmatic cleverness" of the academicians of the Apex Body!

When that position was not available (on paper I would have been ~~to~~ 52 years) for me in 1995 transition, not even with a Spl. Secy post created, I knew that all the efforts

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but for TIFAC would be of little use. 7 years of struggle was necessary to create a new channel in DST to ~~really~~ inject Technology into all sectors of the economy. To orient at least some parts of R&D towards commercialisation ~~to~~ ends. In a way a broader goal than ISRO — but with the same purpose: using tools of

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**Agenda Item 9:**  
**Approval of establishment of University**  
**Ethics Committee for Human Trials.**

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SET for socio-economic benefits of India; to create indigenous technological strengths through some of it, had to be built as important technologies (as that is the way country's industrial build up took place)

It was a dream from my youth. Vaguely inspired from Subrahmanya Bharati, Vivekananda & Jawaharlal Nehru. (See my <sup>India</sup> Science Congress Talk when I received Jawaharlal Nehru ~~ten~~ Awards & — also appeared in Man & Development run by P. N. Haksar in April 1992. "A Glimpse of Technologies: A Vision for India")

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That article is the result of the questions posed by P.N. Haksar to me in the context of the work in TIFAC & DST for which I had moved away from ISRO, from the peak of my position <sup>in 1988</sup> (Of course the future in ISRO was also uncertain looked at from ~~1980-1988~~ 1984-88 position of mine there. Refer to ~~extensive~~ extensive notes by (ante up by me in terms of decades. It will occur in ~~1980-88~~ ~~19~~ to 1970-80 & 1980-90 chapters.)

Even with his eyesight being in a very poor shape

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He was deeply committed to the well being of Indians and to rise of India as a powerful nation. We did not discuss day-to-day politics ~~not~~ nor about some policies or projects ~~under~~ <sup>in</sup> public announcements (which would usually end up as gossip). Our discussions were at a good intellectual level. As a follow-up I used to write letters. I have copies! ~~of~~ Those letters shaped my ideas logically. All I wrote had ~~a large~~ in my background the huge experience gained by my work in TIFAC - Dr. V. Krishnamurthy ~~was~~ Ch. SAIL & Ch. Manicki Ven - was

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also part-time Chairman of TIFAC  
Governing Council, which had many  
stalwarts like Sam Pitroda, VSA,  
~~Sudesh~~ ~~et al.~~ M.M. Sharma, etc.

The Vision I had exchanged  
with PNH was very elaborate.

The different sections of Indians,  
the different industries, agriculture etc.

Therefore one vision, one technology  
milieu was not enough etc. . . . .

That was the nucleus of Vision 2020  
exercise done later. . . . . While the

idea of having such a long

term vision came when Kalam

took over VK's position in <sup>Sept</sup> 1993

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it was based on ~~at~~ several achievements  
of TIFAC already — Missions  
(Three Sugar, Fly Ash, & Composites)  
— opportunity opened up by Rengarajan  
Kumaramangalam, whom I would  
consider as the best MOS (S&T) ~~for~~ in  
GOI so far  $\approx$  (before him & after  
him), ~~the~~ Home Crown Technology  
(HCT) an idea for funding  
as crucial for TIFAC came from  
P. Ramakao, I worked it out with  
VK in Plain Commission. (PRR  
was ~~a~~ very negative on TIFAC  
when he took over — based on his  
only inputs from his "Science - Boss -

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~~ganga~~ "hangas-on", friends; he was also a part of them. But when he became Secy DST after his individual meetings with some TIFAC board members & later, we got convinced that we were doing a very good job and he can put his insights only in Technology by using TIFAC. Hence HAT.... plus a few other ideas.) Later I

had helped salvage NABL

(no one knew its significance then),

- Helped to fully operationalise TDB bill ~~enact~~ enacting the Bill, major initiative on IPR through Patent Facilitation Cell (Data Centre)

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All these were crucial framework for ~~most~~ generating strong commercialisable technologies — what is nowadays ~~and~~ called Innovation Eco System.

HAT was the first of its type of early stage Venture Capital given to Indby — TDB got modelled on that for higher amounts of money. The joint Secretaries in DST both ~~for~~ in Finance & Admin had been of great help to me in shaping TIFAC amidst the message ~~in~~ science — bureaucracy of DST which was set up more to cater to big-guns of S&T and leave the rest wallowing.

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in needlessly inelastic procedures!  
As a Society under DST, TIFAC  
could have been choked &  
suffocated!

Sold I had

All my hope of using  
TIFAC, TDB etc as an instrument  
of Technology Re-generation in  
Indian Industry, Agriculture  
& institutions was getting elusive  
as I could not derive ~~power~~  
administrative power within  
Min of S & T either as Secy DST  
or at least Spl. Secy DST.  
Already the 7 years of toiling

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was a painful process — lots of inefficiencies in transactions as I had to depend on Secy DST... E who was getting pulled for other items; PRR in later years was desiring more for extension or for getting into DRDO as SA to RM. But the later political uncertainties post-1995 helped Kalam. As a friend I had advised Kalam to stay put and not raise the question of stepping down. VSA was putting pressure on him especially during 1994 — that is a big story. Kalam & I since

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Since he came to Delhi uses  
to have almost a daily telecom  
— some on serious matter; some  
"like that" only . . . .

For 1995 transition, I  
had requested Kalam once. He  
said he would do. Later realised  
that he did not / would not.  
He was afraid of the "Science-  
power-dun groups" who may  
attack him. Already some  
of the tops used to make  
~~the~~ snide remarks that  
he was only a Diploma  
holder — distorting the

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Truth that he was B.Sc. DMIT  
full fledged Science & Engineering  
Graduate - as existed in those days.  
Of course he did not have  
PhD or "research" papers as  
he was a project manager par  
excellence for SLV-3 & Missile Program.

Sheer luck he got into  
SAT RM as VSA had a  
pressing need to go away at  
least for two years....

My hope of doing  
major transformation in the  
Technology ~~Scene~~ Scene of India,  
similar to Japan or S. Korea  
or as started by China in that time

Starting 1980's

Land even by Malaysia, Singapore  
 learn alone ~~the~~ Israel, had  
 considerably diminished as it  
 required some policy or procedural  
 tweaks in the various Ministries  
 of GOI. I had excellent  
 relations with many of them  
 right from JS, AS & Secretarys.  
 But still I had only Addl. Secretary  
 Char too with the vague title

Adviser DST! I managed things  
 with God-given ability of interacting  
 and talking relevant things to those  
~~mult~~ different sectoral groups. I

Should also thank P. S. Dhawan  
 who had given me the opportunity

(33) High ranking  
to deal with many such persons from  
different sectors even in Committee of Secretaries  
meetings (The Apex body of the bureaucracy)  
at an age much younger 30+ and  
much junior grade relative to Addl. Secy.

~~But~~ A real help at  
Secretary DST level and pushing with  
policy / procedure tweaking would help.

But it cannot be once in a month  
type. One has to live with ~~one~~ it:

Agriculture; Commerce; Civil Supplies;  
Steel; Coal; Power..... & Finance.

That was not the priority for DST;

That is why really Tiddly - oriented  
work ~~is~~ was (is) not done in a  
major scale. Had VRA continued,  
maybe it would have happened.

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He could not have been in 1995+ as it would be ~~far~~ beyond ~~60~~ 63 years +. He was a rare person; an institution builder. Not therefore recognised as the Science-bosses saw his method of doing practical projects for Socio-economic ministries & industries, a threat to their existence. That is why, they were also deriding TIFAC, saying that it should only forecast of areas near horizon!! (mostly irrelevant to India as we were technologically laggards then!)

Kalam, first of all, too busy with the tasks of SA to RM and Secy DDRD / Chief. DRDO. Secondly his understanding of working with Socio-

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economic Ministers for practical developmental projects/products for civilian commercial sector was poor. So at best he could come for a meeting. The

IAS Secretary would agree as he was Senior Secretary — close access to PM as SA to RM. But the meeting would get lost in generality.

For example we had a specific excellent report from TIFAC for civil aviation sector — Prof Narasimha, Kalam & I had gone. Presentation starts etc. Kalam was unable to press the point of placing on inputs of aircraft certain conditions of "Make in India" as is being

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done now. At that time [Singapore, Malaysia & USA had that. The

report had identified specific items where it could be done immediately.

Also it had identified short term R&D projects/products... (This deficiency follows with him in ~~the~~ the task of PSA's office as well).

So I decided to quit DST & was also ready to quit TIFAC in 1996 after finishing my work of completing Technology Vision for Intra 2020 reports & plus several crucial DST tasks.

~~199~~ July 1995 - Aug 1996

was a period of great humiliation for me, but borne by me with an outwards cheer & vigour of actions.

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When I resigned Kalam & V S Ramaswamy tried to give some lollypops for me like designating me as Director General TIFAC! They were not ready to do the real empowerment of making at least Spl. Secy DST with all Technology items under me. i.e. TIFAC, TDB, NABL etc. (even some part of Engineering R&D)!

So I was clear about being my ~~the~~ ~~res~~ application for voluntary retirement from DST. I can't be more royal than the King. The GOI, Cabinet, Ministers & CabSecy etc were not at all interested in making India & Indian industries

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technologically strong as was done  
by <sup>Japan,</sup> S. Korea, ~~Japan,~~ China, etc. They  
appeared to survive week by week.  
"Science-bosses" were happy with such  
a situation as they would ~~get~~ keep  
getting their para & perks, as GOI  
can keep them pleased and they  
would keep the "S&T/academic"  
community under control — a type  
of zamindari system!

I joined CII for earning  
daily bread and I had some  
hope because of Tarun Das's  
positive approach to create  
~~an~~ awareness in Indian industry.

Yes I got excellent access. A  
number of demonstrative work conts

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be done: Also ~~the~~ DST (mainly due to <sup>MMK</sup> Sandana, JS impressing on VSKanally, asked ~~to~~ me to continue with TIFAC from which I receive no money.

I In CII my understanding of industries needs, compulsions etc became better. I could gather a good young team and ~~also~~<sup>to</sup> have a ~~Committee~~ National Technology Council at CII with Kalam SA G R M as Chairman (a deviation from the norm of having only a Member Industrialist as Chairman) done specially by TD). So the young persons got inspired to work with a big man. Kalam did not have much time nor depth of understanding to persuade

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a few industries to create right types of R&D consortium. But I learnt a lot; I ~~to~~ and some members of young team (Anbu, Rachna & Saranya) went to Israel at CII expense for about 10 days. Excellent learning about how to utilise/harness technology for final commercialisation and the organisational methods...

I did not have any further idea of my future... My dream of creating a technically strong India was being chipped away day-by-day, as Industry leaders were more keen to get tax concessions, etc in the name of

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globalisation & liberalisation. Big Shows, McKenzie reports, & 2 big IT bluff! (~~1996~~ Sept 1996 - Bill March 2000) I was with CII still continuing with TIFAC).

By this time I also learnt the Big Industry persons also make Big Announcements like Politicians, ~~Burea~~ Science-Bosses & some Administrators & placed to talk well of Govt. then in power! Media, of course, needed only bigger & bigger headlines.

"So much investments is going to be done in such & such sector" ... I used to take them seriously because it meant such & such upgradation in Technology

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front with resultant spin off benefits.  
I was always looking for benefits  
to India & Indians.

But alas... I found  
that many of those announcements  
were ~~to~~ more as advertisement  
of companies to show the Board &  
promoters in good light and also  
sometimes aimed to get a better  
returns for a fresh IPO!

Is that what India has  
become? Not to be cynical will  
be tough as I had grown up in  
an overdose of idealism! And  
~~now~~ that some thing was possible  
through ISRO work!

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Even the CII opportunity along with TIFAC (Kalam Skill Chairman VSR being helpful) was fully used by me to do some thing concrete in the field. The <sup>TIFAC</sup> Mission, new Vision 2020 projects, CII Technology Division bringing some global contacts, CII - TDB net etc were being pushed, though I was aware that scale was not adequate. Scale would require some GOI positive & focussed actions ~~take~~ in terms of policy tweak, procedural changes. No one who were not in the system would believe that most of the big ministries / departments positively

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discouraged products ~~but~~ supplies  
out of indigenous R&D; the  
condition was ~~so~~ that such a  
supplier should have at least  
2 years of export experience.  
It was not for private sector  
R&D; but also for PSU R&D  
BHEL suffered.!

Lo! and behold!

Such a strict condition would not  
apply if the Indian company had  
~~an~~ a collaboration with a foreign company!

There are several other  
examples. CII cannot go beyond a  
point. CII's members who were  
businesspersons — big, medium & small —

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would not like to find with Govt  
for such items. Nor would DST/CSIR  
etc. All the more the good. They  
can give this as an excuse of  
not being able to commercialise!!

So one has to be Jesus  
Christ — carrying the Cross! I  
believe I did! (There may be  
some others!) One can see it  
in my poems — Tamil & English.

My first book of English poems  
has a title Agony & Harmony (2001)

I had explained this pain in  
the Preface to the book explaining  
the title!

~~Instead~~ If one did not  
allow cynicism to creep in, one has

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Keep optimism to stick on! Even against rational hopes! That ~~was~~ is what I was doing.

My routine telecon with Kalam continued. There were some small requests given to him for meetings of TIFAC or some CII meet.

He was very helpful. It also helps to keep the machinery moving.

In between the major task of writing the ~~the~~ India Vision 2020 book also came. Mostly handwritten by me from March 1997. ~~I had~~

We were in CII provided house (of course we selected to be near the place we stayed before

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before at ~~D~~ Kidwai Nagar <sup>31</sup> d/11 Dec 1996<sup>2</sup>

~~to~~ to keep our various roots  
~~de~~ developed including proximity  
to AIIMS etc)

Vijay had just got  
<sup>13 Dec 1996</sup> married & was with us. He was  
selected by many US companies.  
Didn't want to open a new house  
for them. He was also on travel  
as ~~an~~ one of the ~~the~~ very early  
SAP / ERP Technical Implementer  
in India, working for Siemens. Vikram  
was in Medical College. My <sup>elderly</sup> father  
who was moving from place to  
place due to his free railway pass  
was at that with us. All  
crowded in a small place in a  
house in Safdarjung Enclave. Otherwise

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well connected.

~~I do~~

I used to start writing the book chapters around 5am.

so that I can give enough material

to Sheridan to type, Then CII

office, ~~or~~ TIFAC work etc. High

pressure! I was also drawn in

by Dr. Munli Manohar Jhari<sup>(MMJ)</sup> for

assisting him; for a while

his ~~speech~~ speech ~~wrote~~ wrote writer too!!

~~At~~ Within CII this increases value!

Then M L Soodhi drawing me into

ICSSR, New Delhi Too much

work! But I was going on with

a hope that <sup>many</sup> such small good

works & successes, ~~done~~ will help

India to be ready for scale up some

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day, when the DAY comes!

Waiting for the Prophet !!

Kalam was partly holding on, ~~because~~ not only because he cannot ~~even~~ think of anything other than being in DRDO or ISRO with missile projects etc., but also because he was wanting to ~~marry~~ marry Agrii with its natural partner — the Nuclear Bomb. We did not think ~~about~~ <sup>project</sup> any time. The fact that we need strong nuclear weapons was clear, as it was with most Indians. ~~No~~ In the long tumultuous politics of India nobody

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wanted India give up the option of nuclear weapons. In some rare interviews <sup>with Press</sup> Kalam had said that Agni was not ~~to~~ built to send roses!

§ He had to wait through the successive PM's. Within DRDO / DAE combine, he definitely had a better access ~~to~~ to PM's being in Delhi, being senior in age and also seniority as Secretary. ~~Though~~ He had later told me why he had to hang on to get an okay.

So with May 1998, that Mission was over. Kalam himself was a little disturbed I think,

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due to some internal pressures. He wanted me to come ~~and see~~ with him to see Sathya Sai Baba. We had a unique get together (See my detailed writing in my other suitcase referred to).

Even Kalam told me while going that many persons told him that he had created some problems for India — maybe they were worried about sanctions.

Sai Baba, even before he raised the issue was warmly spoke of the good work he had done for India. Then there were

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Other things ... (See other write up)

Later too I could see Kalam was under pressure to vacate the SA to Raj position because he was getting 60% & going strong thus denying his juniors (many of whom crossed 60 & he got them long extensions) were itching for a change! There is a poem from me ~~the~~ in Tamil (sent to Kalam) printed later ...

**Agenda Item 7:****Budget 2018-19:**

▷ Revenue Budget 2018-19

▷ Capital Expenditure budget 2018-19

(53)  
(much later)

Later I had learnt from a few persons in bureaucracy that the Chiefs were wanting a change as they could not speak bluntly to such a senior person, a Bhanuakarna, to resolve real working problems in DRDO, whose delivery record was poor. Same problem which troubles ~~VAS~~ VSA. I was told they pleaded with PM to get any other junior person in DRDO <sup>somebody</sup> whom any way were 60+ and thus senior.

~~It appears, from the above~~ They further told me

(54)

PM (Vajpayee) in his gentle style asked him to step down and take up anything else he liked.

Without telling these Kalam once told me that it was time for him to go by giving way for other aspirants in DRDO and he had been ~~set~~ offered a very big project, submarine related, about Rs. 10,000 Crores. He was inclined to take it up.

I was resisting that idea. One was of course, he was 68 years old then and to start a new project from the scratch would be

(55)

tough. He would not like it if told so plainly. But more importantly, I know what it would mean ~~to~~ if he were not Secy of the Dept ~~to~~ and have a subordinate state of Project Director to get various approval.

In ISRO, he was specially protected by S. Dhawan & Brahm Prakash for SLV-3 though he was junior in ISRO's pecking order there.

In DRDO his level was higher; Director DRDL; but he was under the total protection VSA from the interference from DRDO HQ (which was massive & slow!)

(56)

Can Kalam expect that support for 10 years or so when SA to RM / Secy DRDO, come & go! Also those who had give pressure when he was Secy DRDO with all paras, be expected to take care of him specially in a Project, which was one of the several projects of DRDO and ~~one~~ the new one having low priority; the other big delayed projects would require daily

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**Agenda Item 6:**  
**Projected Financial Performance for the year ended 31.03.2018**

(57)

~~big~~ fire-fighting attention...

So I explained to him:

"Sir I know you love big developmental projects. But please

~~note~~ ~~that~~ that in our system

no project can be directly reporting

to Minister or PM. It has to

go through Secy. DDRD (DRDO) or

~~the~~ Defence Secy. You had

been a Chakravarti — can

you become a simple Raja

under a new Chakravarti... Think

about it...."

He used to press this

project ~~for~~ over several days

later also... "Sir; Chakravarti's

(58)

after getting down from throne either  
go Vasavastha or they go  
into exile when made to get down...

I don't think you can  
stand the treatment meted about  
by your juniors — even from  
several levels down.... That is  
life!!

After several weeks the  
govt convinced on having something  
else. That is where a suggestion  
was given to him during our  
talks that he should ~~take~~ take

M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES	
HOSTEL FEE DETAILS-2018-19	
Peenya Campus Hostel	RS.
2 sharing with attached bathroom / Year	45,000
Caution deposit (Refundable)	15,000
Mess Charges / month	3,500

(59)

up ~~at~~ a Top Adviser level position  
in Govt with Cabinet Rank (as

Bhanat Ram he would get it.)  
for dealing with all SET matters  
and applications. After all he  
was by then well known for TIFAC  
& Vision 2020 book which had  
attracted the nation at all  
levels. He was still Chairman TIFAC.

I think he had thought  
over the matter and would have  
consulted A. Sivatham Pillai<sup>(ASP)</sup> who  
had been with him since SLV-3  
days, and later during 1980-1982  
after SLV-3 Project<sup>second</sup> successful launch  
(after the first failure). These two

(60)

years was bad for him. I was Scientific Secy ISRO. I knew ISRO's compulsions and also ~~the~~ ISRO's need to have a younger person for leading PSLV (Kalam was 49 when SLV-3 success came)

Within VSSC hierarchy in terms of Grade, he was junior to number of person. He <sup>(K)</sup> had later told me how those two years were "vegetable period" for him. "I was vegetable Sir" he used to recall often.

~~ASP~~ Kalam had a big title in ISROHQ as Director Special Launch Series — little work that was related to main stream of ISRO ASP stood by him. Later ~~she~~

(61)

a couple of years ASP went and joined DRDO. He wanted PSLV also. I advised him "Never Come back, # Make a success there." ASP went through ~~to~~ difficult phases in DRDO, helped Kalam a lot and remained as his confidant. Fortunately by then (that is this period of Kalam coming to leave DRDO), ASP was settling well with the then unique Joint Venture Project Brahmos.

Note:1 - M.Pharm - Out of the Nine Courses four courses are not offered in 2018-19

M.Pharm Intake - 2018-19		Annexure : 8	
M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES			
Master of Pharmacy (M.Pharm) (Note:1)	Govt. Seats	University Seats	Total
Pharmacognosy	7	8	15
Pharmaceutical Chemistry	8	7	15
Pharmaceutics	7	8	15
Pharmacology	8	7	15
Pharmacy Practice	4	5	9
Total:	34	35	69

(62)

It was a great success later & was the only one missile project ~~was~~ which was produced on large scale with large private sector involvement. And above all had been accepted by all services — inducted into regular ~~force~~ Force and sought after by many countries.

This was not so in 1999<sup>end</sup> - 2000 beginning when Kalam was being but had taken off <sup>later.</sup> ASP as a ~~confidant~~ confidant, I think

had supported this idea. He told me he had checked with PMO also that is Brijesh Misra.

One day Kalam called me during day time, normally does

(63)

not disturb me<sup>so</sup> as he knew I was busy with two full time active jobs of TIFAC & CII in addition to side<sub>informal</sub> help to DST

"Rajan, where are you? In Delhi? ... Then come immediately Sivatham Pillai & I are here in my office. ~~SAT~~ Leave every thing & come. We need to write about the new office."

I rushed. Saw the notes. As Kalam had done some parallel — no where near Vision 2020 exercise — ~~study~~ study India Millennium Mission 2020 in DRDO — One report of medium size. I don't think it was dismissed very much. He might have

(64)

done it under the pressure of two staff officer Dr. Vijayaraghavan & Dr. W. Selva muthy, Kalam's some life sciences, yoga related adviser. He might have asked ASP to fit that into the new office. So ~~it~~ the ~~was~~ draft was all about "Realisation of ~~the~~ Indra Millennium Mission 2020"

When I saw it I said "Sir ~~the~~ Govt cannot a new important office ~~to~~ for one Mission. That too it is DR Do orientes. Does not have any approval by ~~Govt~~ in its deliberative process.

We need a generic statement for this office.

It ~~is~~ should ~~to~~ cover all items related to SET for GOI as a whole — all departments and ministry. In that way it would cover many technologies about to be put into operational commercial for Govt and also in the country...."

Then I attempted a draft. He had to rush to see Bijesh Misra. So ASP, he & I touched it up. Then a fresh handwritten note was done.

M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES			
FACULTY OF MANAGEMENT & COMMERCE			
Annexure: 5			
Seat Quota			
Sl. No.	Courses	Karnataka Govt. Seats	University Seats* Total Seats
1	B.Com (Hons.)	NA	60
2	Bachelor of Business Administration (BBA)	NA	60

Note:- \*Up to 15% of seats are reserved for foreign / NRI Students

(66)

I don't think it was types. He went to Brijesh Misra <sup>(BM)</sup>. For

B BM and later PM it would not be an issue at all. A man

Kalam who had done so much for the security of the nation, did India proud by first SLV-3 launch a Bharat Rikna ~~to~~ to have an office at Cabinet level with a nice title "Principal Scientific Adviser to Govt of India" (I

was particular about this word GOI not just PM or Cabinet as earlier SAC- to PM & SACC were.

SACC can come under this office with PSA to GOI in the chair.)  
With the same terms of reference of role & responsibility you officers in our note!

(67)

Office location, staffing etc were details they need not worry. How it will shape also was not their immediate concern. Frankly S&T and its utilisation for the country, was not in the radar at all for such top persons. It was good for inspirational talk by them on some important S&T Day. Vajpayee Govt had made 11<sup>th</sup> May as Technology Day (the day of Pookaran II). I felt it was wrong way to depict the image of Technology to Indian people! In a Bomb!



(69)

అంతా తన దుస్తులు... ?

"That we would study <sup>science</sup> ~~all~~ about Moon  
Also learn the ~~street~~ a science of  
cleaning the streets!"

Any way the higher ups  
would wash their hands off by  
giving Kalam a ~~a~~ very respectable  
position. And solve the problem of  
~~the~~ ~~having~~ DRDO, by giving  
a new person to make all happy.

Also 69 was too ~~large~~ large an age  
to continue as Secy GOI.

~~So~~ I think in a  
couple of days, that new position  
for Kalam was announced  
and asked him to continue as  
SABRM to select a successor and

(20)

handover. It was an easy job as Dr. Aatre was in line, senior to all. He was give a five year term. He was ~~keep~~ keen to occupy his room urgently.

~~B~~ But Kalam did not have an office space. After a couple of days of embarrassing situation, K sat in Aatre's ~~staff~~ staff room!

Soon the problem was solved to give Kalam a room in Vigyan Bhavan Annex. I had nothing to do with that office then. K had requested Maj Gen Sivaramanathan of DRDO, another of a favourite of ~~D~~ Kalam to come &

(71)

inspect the room. I was also called ~~in~~ in. I looked at security aspects as ~~they~~ there was no separate toilet for PSA. It was general public toilet used by staff.

~~Am~~ There was Liboan Commission of 1984 Sikh massacre after ~~Indira~~ Indira Gandhi's death many ~~room~~ Many such enquiry commissions!

Mostly closed but not available. So I gave my advice about changes etc & left to Kalam Gen Swaminathan.

About a week or two later Kalam called me and said

(72)

that he needed me in his office  
 as they wanted to constitute  
 Scientific Advisory Committee  
 to Cabinet (SACC) and they  
 needed a Member-Secretary for  
 it as Secretary to Govt level.

I did not show much  
 of interest in joining as I knew  
 about SACC works before right  
 from the time of ISRO (1980's  
 when Prof. S. Dhanu (S.D.) used to give me the

Sl. No.	Item	Annexure
INTAKE & FEE STRUCTURE 2018-19		
1	Fee Structure 2018-19	
2	Student Facilities Fee 2018-19	
3	B.Tech Intake 2018-19	
4	B.Design Intake 2018-19	
5	B.Sc (Hons) Intake 2018-19	
6	B.Com (Hons) & BBA Intake 2018-19	
7	M.Tech (Full-Time) Intake 2018-19	
8	M.Tech (Part-Time) Courses 2018-19	
9	M.Pharm Intake 2018-19	
10	MDS Fee 2018-19	
11	Hostel Fees	

(73)

papers to read. It was MGK chair  
and a group of "senior" & eminent  
scientists — some recycled — and  
Secy's of Science Depts. Very little  
concrete discussion. Same items  
cycled again. Talking about the  
need for "freedom" science departments/  
agencies, freedom from bureaucratic  
controls etc. No concrete S&T  
projects to be achieved for the country  
No focus.

I used to summarise & place  
for SD. He will say "Rajan don't  
put too much efforts! I may  
go there & learn ~~some~~ some! Just  
to give solidarity!"

If the same type of  
SAC-C ~~was~~ were there what is the  
point? Kalam said "Rajan: you

(74)

join. Every body is advising me that I should have you. There is no pre-set SACC. We have to propose."

He knew the limitations of CII work as he was exposed to NTC. CII's main problem was raising money from Members for technology work. Even for Symposium / Summits CII depended on ~~the~~ Member's sponsorship.

They would be willing to give lot of money when PM, Fin. Min, Commerce / Industry Ministers were there.

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Approval of Fee Structure and Refund Policy

Agenda Item 5:

(75)

Those who had para to sanction their projects / change rules etc. Nothing in S&T Minister! For nucleating technology projects even by an individual industry there was very little incentive as R&D derived products were not respected by work rules — I had given a few examples

before. So the CII work had several limitations to do some thing concrete. Only TIFAC was available for me.

So Kalam tries to attract me: "Rajan: there are lots of constraints in your CII work also. From here with some govt support & TIFAC we can do more!"

There was some truth in it. It depended upon how it would work.

(76)

Then I told him one thing plainly: "Sir unless the position is clearly designated as Secy to GOI, it will constrain the work."

Member-Secretary SACC etc won't cut water with most depts.

You knew my limitations in TIFAC when I was AD/Secy DST"

~~Kalam~~ I also added ~~that~~ "I am not asking it for my prestige. But if that office of mine does not even have a position ex-officio Secy to GOI

in the least, it

will not carry weight! & If

Term Loan status

Agenda Item 4:

(77)

want to do something concrete that is required for me!"

He said "Yes, I talked to Bijesh Misra. It will be Secretary level position".

I said "Sir Secy level is one thing. Being Secy formally designated as Secy to GOI is another!"

He said "No problem! I will take care!"

He was pressing me. I met Tarun Das. (TD). He was a sagacious man, at least with me all the time. He said "Rajan, it is good; ~~that~~ you go. Though CII has rules of notice etc

(78)

You just write a note to me  
addressing Secretary CII. I  
will approve and give relieving  
order, so that Govt can issue  
order appointing you. They need  
to go to ACC etc"

He knew the rules.  
So I was relieved from CII &  
I sent a copy to Kalam.  
Then I got an GOI order  
appointing me in PSA office  
as Member Secy SACC.

Vice Chancellor will present the same in the meeting

**Agenda Item 3: Operation Review**  
I joined. Lots of loose ends. No staff. The  
office was to set up. Only Kalam's

(79)

room has some shape. He had brought H. Sheldon with him requesting Aatre then SA to RM. Kalam, of course, had his driver, security etc as he was <sup>in</sup> L<sub>2</sub> + security cover!

As Minister rank he had a ~~pl~~ plethora of staff he could appoint except those allotted for constituency for the political Ministers. But there was a caveat: he can take any person (literally a person from the street) & appoint to any level.

But with a Govt servant they had

strict rules in terms of the level to which the existing Govt servant can be put. I admire our bureaucracy some ~~time~~ time. If this condition were not there the Ministers & such political appointees can wreak a havoc with a havoc with the existing Govt servant by playing ~~a~~ a game for his "favourites". No way! Those who has been picked up by him outside Govt — no problem but

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Matters arising from previous Minutes

**Agenda Item 2:**

their term is co-terminous with the Minister! Yes play some havoc

(81)

but it is not permanent.

Therefore Sheridan would lose when he joins the Minister. The deputation level almost with SA to RM regular. ACP servant is not allowed for Minister.

Kalam put pressure on Sheridan to join. I told him: "Wait; unless you get a good grade by normal ACP rules, keep working as DRDO persona in the old scale as you had with SA to RM — actually you are recruited from SA to RM office informally.

I don't want to elaborate these points. I got Sheridan as my

(82)

Page 15 of 15

Principal Private Secy & placed him  
in Kalam's office. So I lost my  
person .....

Coming to my own designation  
etc. Kalam had "Chickened out"  
with ~~the~~ Cab Secretary & I took  
the designation as Secy to GOI even  
Ex-officio. ~~He~~ Kalam was  
trying to sell me the idea of  
Scientific Secy to PSA to GOI —  
my Scientific Secy in ISRO was  
with Scientific Secy to Chairman ISRO

(Signature of Chairman)

Adopted by the Board of Governors at its meeting held on

The meeting ended with a vote of thanks to the Chairman.

unanimous consent.

There being no further business the Chairman declared the meeting adjourned by

(83)

It was Scientific Secretary, ISRO  
Prof S. Dhawan was very particular  
on this. I was for whole of ISRO.  
not just attached to big-boss.

It was a big let down - Kalam  
shows his reluctance to move  
on that with Brijesh Mista!

It was not just a personal  
let down but a let down for  
the Office of PSA. The person  
who ~~to~~ serviced it, who was  
Head of Dept in literal terms  
to run the administration etc  
was not equal to Secy DST,  
Secy DBT etc or any other

(84)

Secretary or even Sp. Secy to GOI. It was only Secretary level officer! That devalues that office. I could not even get a RAX.

~~Kalam~~ with R That is a secure phone. That is a great differentiator within bureaucracy. If you are listed in the RAX telephone directory — you are in the Club of Secretaries or very important person even when you are not Secy

---

Minutes of the previous meeting.

**Agenda Item 1:**

Kalam who did not press it, told: "Use my phone!"

(85)

I never used it!

Several such humiliations  
in administrative sense ~~deval~~  
devalues that office. That  
shows the ridifference (or ignorance)  
of Kalam as to how Govt works,  
to get things done! May be

he did not want to do any  
thing more; I won't know!

I had  $\&$  many personal  
problems due to that. Apartm

And apartment would not  
get allotted fast to me.

TD was gracious to tell me "Bajan

(next book #2)