### APPENDIX 1)

# RETIREMENT BENEFITS AND FAMILY PROTECTION

NOTE PREPARED BY MR. A. H. WILSON, MILITARY ACCOUNTANT GENERAL.

In my reply to question No. 33 of the questionnaire circulated by the Central Pay Commission I proposed the introduction of a combination of Pension, Contributory Provident Fund and short term Endowment Life Assurance, in order to remedy as far as possible the defects I see in the system now in operation.

## 2. Briefly these defects are:-

- (a) Pension alone: this makes no provision of any kind for the family in the event of the death of the wage-earner before he has been able to effect commutation of a portion of his pension.
- (b) Pension combined with ordinary Provident Fund: this is a very slight improvement on (a), but the provision for the family in the event of the premature death of the wage-earner is negligible.
- (c) Contributory Provident Fund: this makes provision for the family to an ever increasing extent, but the amount is small in the earlier years. Moreover, the Government servant who lives to draw the balance is vulnerable, since he may lose it all by ill-advised speculation.
- 3. Under the scheme I propose, the Government servant who lives to retire will be protected against absolute destitution by the pension element, although, since the cost of Government's contribution to the Provident Fund and Endowment Policy will presumably have to be met from within the estimated cost of the pension at present earned, the pension will be smaller than at present. The protection for the family afforded by the Contributory Provident Fund will be augmented in the earlier years by the Endowment Policy. When the Policy matures, the proceeds will be added to the Contributory Provident Fund balance and earn interest in the normal way.
- 4. The Government servant will subscribe, to the Fund from the commencement of his service, month by month; and the Government contribution, equal to the twelve monthly payments made by the Government servant, will be added annually in arrears. When I gave evidence before the Commission on the 20th September, I stated that the Endowment Policy would be taken out at the end of the 5th year of service. On further consideration I have decided that this is too late, and I now prepose that it be taken out at the end of the second year of service. I have two additional reasons for suggesting this date: (a) there will be a small accumulation in the Fund upon which to draw; and (b) since an officer spends his first two years on probation, it would be ill-advised to take out an Assurance Policy before he has been confirmed. I suggest that the Endowment Policy be for a term of fifteen years, for shortly before the end of that period a straight-forward Provident Fund out-distances Assurance.

#### APPENDICES

- 5. In order to show the effect of the scheme, I have worked out three hypothetical cases: namely, that of a cierk who subscribes 10 per cent. of his salary; that of an officer who subscribes 10 per cent. of his salary; and since it is possible that a subscription of 10 per cent. may be thought too heavy a hurden on the individual, that of an officer who subscribes 5 per cent, of his salary. In each of these three cases I have assumed that the Fund earns interest at 3 per cent., that the rates of pay I proposed in my reply to the questionnaire are in operation, that the Government servant will be 27 years of age next birthday when the Endowment Policy is taken out, and that he retires on completion of 30 years service. In the case of the clerk, I have assumed that he remains a clerk throughout his total service: that is to say, he fails to pass the Subordinate Accounts Service Examination. In the cases of the officers, I have assumed that they enter the senior Class II scale of pay on completion of six years service. are promoted to Class I on completion of 18 years service, and are promoted Command Controllers on completion of 25 years service. The Endowment Policies are taken to cost Rs. 63/10 for each Rs. 1,000 of Assurance. This rate of premium will be found in the prospectus issued by the New India Assurance Company in August 1941.
  - 6. I attach a table in respect of each of the three examples I have selected showing:—
    - (a) The rise of a Contributory Provident Fund without an Endowment Assurance Policy; and
    - (b) The rise of the same Contributory Provident Fund with the Endowment Policy super-imposed.

In each table I separate the subscriber's portion of the Fund from the Government portion, in order that the cost to Government at every stage may be seen. Half the cost of the Policy is charged to the subscriber's portion of the Fund, the other half to the Government portion. The proceeds of the policy when it matures, being cash, are added to the subscriber's portion of the Fund.

- 7. There is one important difference between a Pension and a Contributory Provident Fund. A pension is only a partial liability to the State in the sense that it becomes effective only in those cases where the Government servant lives to draw it. If the Government servant dies before retirement, or, having retired, before commutation is effected, the liability of the State in the matter of his pension vanishes. In the case of a Contributory Provident Fund the liability of the State is real from the outset, for the balance standing to the credit of a subscriber is payable to his estate if he should die before retirement. Due weight must be given to this difference when calculating the extent to which existing pensions would have to be reduced in order to meet the cost of the Contributory Provident Fund and Endowment Policy I propose. This, in my view, is a matter for an Actuary.
- 8. I shall now examine in some detail the hypothetical cases I have selected.

#### APPENDICES

### I. The Clerk.

- (a) This man, if governed by the pension rules now in operation, is entitled to a pension of Rs. 100 per mensem on retirement after completing 30 years service. He is entitled to commute half his annual pension, i.e., Rs. 600. If 56 years of age next birthday and in good health the commutation factor is 11 09 and he thus receives Rs. 6,645 m a lump sum, and draws, until death, a decreased pension of Rs. 50 per mensem. There is no protection for the family until he has effected commutation, and the liability of Government is nil in the event of premature death.
- (b) In columns 4, 5 and 6 of the Table I, I show the growth of a Contributory Provident Fund to which the clerk subscribes 10 per cent. of his salary monthly and to which Government adds at the close of each year a contribution equal to the twelve monthly instalments subscribed by the clerk. In this case, the liability of Government is real from the beginning, commencing with Rs. 96 at the end of the first year and rising to Rs. 8,530 at the end of the (birtieth year (column 5). In this case there is protection for the family from the beginning, but it is low in the earlier years (column 6).
- (c) In columns 7 to 12 of Table I, I shew the growth of the Contributory Provident Fund described in the previous clause from which an Endowment Policy of Rs. 4,000, maturing in 15 years, is financed. In this case, also, the liability of Government is real from the outset and rises from Rs. 96 at the end of the first year to Rs. 6,871 at the end of the thirtieth year (column 10). The protection afforded to the family is substantial from the end of the second year of service (column 12).

# (d) To sum up:—

- Pension provides no protection for the family until the Government servant retires and commutes a moiety. On the assumption that he will be 56 years of age next birthday, the result is Rs. 6.645.
- A simple Contributory Provident Fund provides protection for the family rising from Rs. 439 at the end of the second year to Rs. 17,203 at the end of the thirtieth year. Only at the end of the twelfth year does the protection for the family exceed Rs. 4,000.
- The cost to the State at the end of 80 years is Rs. 8,530.
- The Contributory Provident Fund and Endowment Policy provide protection for the family rising from Rs. 4,184 at the end of the second year to Rs. 15,939 at the end of the thirtieth year. The cost to the State at the end of 30 years is Rs. 6,871.

#### APPENDICES

## II. The Officer subscribing 10 per cent.

- (a) This officer, if governed by the pension rules now in operation, is entitled to a pension of Rs. 6,000 per annum plus an additional pension of Rs. 1,500 per annum making Rs. 7,500 per annum in all, on retirement after completing 30 years service. He is entitled to commute Rs. 3,750 per annum. If 56 years of age next birthday the commutation factor is 11.09 and he therefore receives a lump sum payment of Rs. 41,587-8-0 and draws until death a decreased pension of Rs. 3,750 per annum. The liability of Government is nil in the event of premature death.
- (b) In columns 4, 5 and 6 of Table II, I shew the growth of a Contributory Provident Fund to which the officer subscribes 10 per cent. of his salary monthly, and to which Government adds at the close of each year a contribution equal to the twelve monthly instalments subscribed by the officer. In this case the liability of Government is real from the outset, being Rs. 360 at the end of the first year and rising to Rs. 52,067 at the end of the thirtieth year (column 5). In this case there is protection for the family from the beginning, but it is low in the earlier years (column 6).
- (c) In columns 7 to 12 of Table II, I shew the growth of the Contributory Provident Fund described in the previous clause, from which an Endowment Policy of Rs. 15,000, maturing in 15 years, is financed. In this case, also, the liability of Government is real from the outset and rises from Rs. 360 at the end of the first year to Rs. 45,836 at the end of the thirtieth (column 10). The protection afforded to the family is substantial from the end of the second year of service (column 12).

### (d) To sum up:-

- Pension provides no protection for the family until the officer retires and commutes a moiety. On the assumption that he will be 56 years of age next birthday the result is Rs. 41,587-8-0.
- The simple Contributory Provident Fund provides protection for the family rising from Rs. 1,471 at the end of the second year to Rs. 105,017 at the end of the 30th year. Only at the end of the eleventh year does the protection for the family exceed Rs. 15,000. The cost to the State at the end of 30 years is Rs. 52,067.
- The Contributory Provident Fund and Endowment Policy provide protection for the family rising from Rs. 15,516 at the end of the second year to Rs. 100,210 at the end of the 30th year. The cost to the State at the end of 30 years is Rs. 45,836.

# III. The Officer subscribing 5 per cent.

(a) Pension and commutation details are identical with those given under II a. The liability of Government is nil in the event of premature death.

#### APPENDICER

- (b) In columns 4, 5 and 6 of Table III, I show the growth of a Contributory Provident Fund to which the officer subscribes 5 per cent. of his salary monthly, and to which Government adds at the close of each year a contribution equal to the twelve monthly instalments subscribed by the Officer. In this case the liability of Government is real from the outset, being Rs. 180 at the end of the first year and rising to Rs. 25,916 at the end of the 30th year (column 5). In this case there is protection for the family from the beginning, but it is low in the earlier years (column 6).
- (e) In columns 7 to 12 of Table III, I shew the growth of the Contributory Provident Fund described in the previous clause, from which an Endowment Policy of Rs. 8,000, maturing in 15 years is financed. In this case also the liability of Government is real from the outset and rises from Rs. 180 at the end of the first year to Rs. 22,601 at the end of the thirtieth (column 10). The protection afforded to the family is substantial from the end of the second year of service (column 12).

### (d) To sum up:-

- Pension provides no protection for the family until the officer retires and commutes a moiety. On the assumption that he will be 56 years of age next birthday the result is Rs. 41,587-8-0.
- The simple Contributory Provident Fund provides protection for the family rising from Rs. 735 at the end of the second year to Rs. 52,285 at the end of the thirtieth year. Only at the end of the twelfth year does the protection for the family exceed Rs. 8,000. The cost to the State at the end of 30 years is Rs. 25,916.
- The Contributory Provident Fund and Endowment Policy provide protection for the family rising from Rs. 8,226 at the end of the second year to Rs. 49,703 at the end of the thirtieth year. The cost to the State at the end of 30 years is Rs. 22,601.

TABLE I.—Clerk Subscribing 10 per cent of his salary

a)	64-8 per I.s. 128 Govern-	Total of columns 7, 8 & 11.	12	Rs,	193	4,184	4,185	4,201	4,217	4,258	4,300	4,368	4,438	4,534	4,638	4,759	4,888	ā,045
OWNENT POL	olicy is Rs. Cand charged per annum to	Policy Protection.	11	Rs.	Nil.	000'₽	₹,000	4,000	4,000	4,000	4,000	4,000	4,000	000'\$	4,000	4,000	4,000	UU6)*≱
IND CHEM TEND	Endownent Pe 255 per annum und. Rs. 127 ofthe Fund.	Progressive cost to Government. Total of Columns 8 and 9	10	Bs.	96	218	840	474	809	755	200	1,062	1,223	1,397	1,573	1,761	1,051	2,155
Pacytogen Fr	he <b>Eg.</b> 4.000 ] adea of to Rs. orther of the F sent ; ortions	Premia disbursed to date by Government.	G	Rs.	Nü.	721	25.4	381	208	685	762	880	1,010	1,148	1,270	1,397	1,524	1,651
COMPERHENCE V DECTINENT FIRM CAM EXIDENTINE POLICY	The annual premium for the Bg. 4.000 Fuldwarent Folicy is Rs. 554-8 per annua. This has been rounder of the Rs. 255 per annum and charged 11s. 128 per annum to subscriber's portion of the Fund. Rs. 127 per annum to Government of subscriber's portions of the Fund.	Government portion of the fund, less share of premium.	æ	Rs.	96	91	98	93	100	120	140	173	702	757	302	364	427	P04
5	The annual annum. Thi per annum to	Subscriber's partion to the Frud, less share of premium.	<b>r</b> -	Rs.	97	93	66	108	117	138	160	195	231	2.50	851	305	461	541
		Total of columns 4 and 5.	9	Rs.	103	439	693	879	1,273	1,600	1,087	2,208	2,691	8,110	8,541	4,000	4,493	5,012
	FUND	Government portion of the Fund.	G	Rs.	96	218	344	488	632	794	1961	1,145	1,835	1,548	1,767	1,889	822,28	14.288
	Contributory Provident Pund	Endscriber's portion of the Fund.	4	Rs.	76	221	349	493	641	808	976	1,163	1,856	1,567	1,784	2,020	2,268	2,528
	Contributory	Subscription per mensem during year.	€	Rs.	æ	10	10	11	11	12	12	13	18	- 14	34	15	1.8	18
وبالمرابع ويسمين معرفي ويومري ويومر	Normal (	Salary per mensem during year.	¢1	Rs.	08	100	105	110	115	120	125	130	135	140	145	150	158	160
			-		st year .	2nd	rd . ba	4th	· · · · · · · · · · · · · · · · · · ·	eth	7th .	sth		· -				45
			<b>=</b>		End of 1st year	. 22	3rd	<b>4</b> £	5th	19	7.	. 8	9th	10th	11tb	12th	1845	14th

4,000   5,208		5,852		260'4		_					9,191 9,650 9,650 10,732 11,657				9,191 9,850 10,732 11,687 12,366 13,220 14,100
2,362	2,583	2,807	3,050	3,300	3,569	8,848		4,144	4,451	4,144 4,451 4,767	4,144 4,451 5,092	4,144 4,451 4,767 5,092 6,427	4,144 4,451 4,767 5,092 5,127 5,772	4,144 4,451 4,707 5,092 5,427 5,772	4,144 4,707 5,092 5,772 6,128 6,491
1,778	1,905	1,905	1,905	1,905	1,905	1,905		1,905	1,905	1,905 1,905 1,906	1,905 1,905 1,905 1,005	1,905 1,905 1,905 1,905	1,905 1,905 1,906 1,905 1,905	1,905 1,905 1,905 1,905 1,905 1,905	1,905 1,905 1,905 1,905 1,905 1,005 1,005
584	678	002	1,145	1,305	1,664	1,941		2,230	2,230	2,230	2,546 2,546 2,862 3,187	2,230 2,546 2,862 3,187 3,522	2,536 2,546 2,862 3,187 3,622 3,622	2,536 2,546 2,362 3,187 3,552 3,567 4,223	2,230 2,540 2,862 3,187 3,622 3,622 4,223 4,223
624	722	4,950	5,318	5,097	06J*9	6,513		6,952	6,952	6,952 7,404 7,870	6,962 7,404 7,870 8,350	6,952 7,404 7,870 8,350 8,844	6,962 7,404 7,870 8,350 8,844 9,853	6,962 7,404 7,870 8,350 8,544 9,853	6,962 7,404 7,870 8,350 8,544 9,353 9,877
5,648	6,121	6,715	7,351	8,00	8,705	9,425		10,191	10,101	10,191 10,980 11,792	10,191 10,980 11,792 12,629	10,191 10,980 11,792 12,629 13,490	10,101 10,980 11,702 12,620 13,490	10,191 10,880 11,792 12,629 13,490 14,377 15,291	10,191 10,880 11,792 12,620 18,490 14,277 15,291
2,752	3,034	3,829	8,644	8,919	4,516	4,073		5,053	5,053	5,053	5,053 5,444 5,847 0,272	5,053 5,444 5,847 6,262 6,689	5,053 5,444 5,847 6,262 6,689 7,120	6,444 6,444 6,2f2 6,750 7,150 7,582	5,058 6,444 6,847 0,262 6,689 7,129 7,582 6,040
2,796	3,087	8,386	3,707	4,637	4,380	4,752		5,138	5,138	5,138 5,536 5,945	5,138 5,536 5,945 6,367	5,138 5,536 5,945 6,367 6,867	6,138 5,686 5,045 6,367 7,245	6,188 6,686 6,945 6,367 7,246 7,746	6,188 6,686 6,045 6,367 7,246 7,770 8,184
16	17	11	18	18	19	10		20	02 22	& & & & & .	& & & & & & & &	02 02 02 02 02 02 02 02 02 02 02 02 02 0		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ର ର ର ର ର ର ର ର ର ର ର ର ର ର
165	170	175	180	186	190	195		200	200	200	200 200 200 200	200 200 200 200 200	200 200 200 200 200	200 200 200 200 200 200 200	200 200 200 200 200 200 200 200
-	•	•	٠	•	•	•	_	•	• •					* * * * * * *	* * * * * * *
٠.	•		•	•	•	•									
.15th	16th	17th	1811	19th	20th	2154	22nd		23rd	23rd 24th	23rd 24th 25th	23rd 24th 25th 26th	24th 24th 25th 26th 27th	25th 25th 25th 26th 27th 28th	29rd 24th 25th 26th 27th 27th 29th

TABLE II.—Officer subscribing 10 per cent. of his salary

					_				dysia de la company de la company de company		
			OBDINABY	Ordinary Contributory Provident Pund	PROVIDENT	Co The annual p	ntrictory I	CONTRINCTORY FROWIDERT FUND AND ENDOWMERT POLICY The annual premium for the Re. 15,000 Endowment Policy is Re. annum, This has been rounded off to Re. 255 yer, annum and	D AND ENDOW indowment Pol Its. 955 per	DOWNERT POLICY POLICY POLICY IN Re. Per annum and	954/6 per charged
	Salary per mensem	Subs- cription				Bs. 478 pt Rs. 4	er annum tosu 77 per annum	Bs. 478 per annun tosubscriber's portion of the Fund. Rs. 477 per annun to Government's portion of the Fund.	tion of the Fun 's portion' of tl	id. he Fund.	
	during year	merikem during year	Subscriber's portion of the Fund	Government portion of the Fund	Total of columns 4 & 5	Subscriber's portion of the Fund, less share of premium	Government portion of the Fund, less share of premium	Premia disbursed to date by Government	Progressive cost to cost to cost to Covernment Total of confines S & 9	Policy Protection	Total of columns 7, 8 and 11
r4	¢Ί		vigs .	າດ		<u>r-</u>	a	<i>3</i> 3	91	11	15
	.Bs.	R5.	Rs.	Rs.	RB,	Rs.	B.	Es.	Rs.	Rs.	Ra.
End of 1st year	300	30	365	360	725	365	360	1iN	360	Nil	725
2nd	300	98	141	730	1,471	263	253	477	730	15,000	15,516
srd	400	0.7	1,251	1,231	2,432	280	263	954	1,217	15,000	15,543
4th	425	42	1,800	1,771	3,571	320	297	1,431	1,728	15,000	15,617
5th	450	45	207,405	2,364	4,766	400	368	1,908	2,276	15,000	15,768
6th .	475	47	3,047	2,998	6,045	209	166	2,385	2,851	15,000	15,973
7th	080	63	8,906	8,843	7,749	812	758	2,502	3,620	15,000	16,570
8th .	665	99	4,828	4,740	9,568	1,163	1,095	3,839	4,434	15,000	17,258
9th	700	70	5,826	5,722	11,548	1,573	1,490	8,816	5,396	15,000	18,063
10th	736	73	6,891	6,769	13,660	2,032	1,933	4,293	6,226	15,000	18,965
11th	770	77	8,036	7,896	15,932	2,553	2,437	4,770	7,207	15,000	19,990
12th	202	980	9,252	8,092	18,344	8,127	2,993	5,247	8,240	15,000	21,120
13th	840	58	10,553	10,372	20,925	8,767	8,613	5,724	9,337	15,000	22,380
14th	875	100	11,934	11,727	23,661	4,462	4,288	6,201	10,489	15,000	23,750
15th , , ,	910	16 .	18,401	18,160	26,561	5,227	5,031	8,678	11,700	16,000	25,268

16,592
20,334
88,387
200 52,950 52,067

TABLE III.—Officer subscribing 5 per cent. of his salary

Chapter Corpus   Co	ORDIKARY CONTRIBITORM  Subscriber's Government portion of the Fund the Fund the Fund (180 885 870 885 885 1,194 1,176 1,486 1,510 1,510 2,555 2,581 2,	CONTRIBUTION TROYIDERT FUND AND ENDOWMENT POLICY  The annual premium for the Rs. 2,000 Endowment Policy is Rs. 5,00 per annum.  This has been clauged :—  Rs. 255 per annum to subscriber's portion of the Fund.  Rs. 254 per annum to Government portion of the Fund.	columns Subscriber's Government Premia discognation of the Fund, less share by premium	8 9 10 11 12	Rs, Rs. Rs. Rs. Rs. Bs.	362 182 180 Nil 180 Nit 862	735 115 111 254 865 8,000 8,226	1,240 107 100 - 508 608 8,000 8,207	1,784 111 101 762 863 8,000 8,212	2,869 127 114 1,016 1,130 8,000 8,241	2,896 156 139 1,270 1,409 8,000 8,295	3,835 283 261 1,524 1,785 8,000 8,544	4,748 438 410 1,778 2,188 8,000 8,848	5,788 622 588 2,082 2,620 8,000 9,210	6,775 824 783 2,286 5,069 8,000 9,607	7,896 1,057 1,008 2,540 3,548 8,000 10,065	9,099 1,281 1,264 2,794 4,058 8,000 10,585	10,857 1,617 1,551 8,048 4,599 8,000 11,168	11,782 1,934 1,859 3,302 5,161 8,000 11,798	18,178 2,285 2,200 8,556 5,758 8,000 12,686
Snoscription Tel mensem duting gear  Ba.  15 20 20 21 22 23 23 23 24 45 46	Snoscription Tel mensem duting	Ordifary Coryrids Tok		, r. q. —			·	<b>-</b>			<u> </u>				<b></b>			NG)	6	8,643 6,635
	8ainty per grant of the	Sabscription	per mensem during year	#6	B8.		,													

			;	Ş	360 8	- 101 K	16.336	11,348	3,241	3,810	7,051	:	14,589
17.			966	64 .	20070	4014g	18.035	12,298	3,938	8,810	7,748	:	16,235
18th		•	1,015	OG .	rania		460 06	13.398	4.776	8,810	8,586	:	18,174
19th			1,200	8	10,095	40 0 0 E	19.19.8	14,556	5,683	3,810	0,473	;	20,219
20th			1,250	7,0	501,11	19 089	24 362	15,785	6,612	8,810	10,422	:	22,397
21st			1,300	9 8	19 (85	19.248	26.713	17,075	7,614	3,810	11,424	:	24,089
22nd		•	1,350	5 6	14.799	14.485	29,207	18,440	8,082	3,810	12,492	;	27,122
23rd			1,400	3 6	16.041	15,783	31,624	19,871	908'6	8,810	13,616	:	29,677
24th			OC#1	į į	17.436	17,156	34,592	21,381	11,000	3,810	14,810	:	32,381
25th	•		1,500	2 8	19 056	18.750	37,806	23,119	12,410	3,810	16,220	:	35,520
26th			008'1	OR 60	50.749	20,416	41,165	24,934	13,886	3,810	17,696	:	38,820
27¢b			1 000	55	22,529	22,168	44,697	26,840	15,442	8,810	10,252	:	42,282
78tp			1.950	26	24,417	23,997	48,414	28,828	17,079	8,810	989,02	:	45,907
1302 1008			2,000	100	26,369	25,910	62,235	20,912	18,791	8,810 (	109,22	:	48,703
			_										