

CANADA PENSION PLAN EMULATOR



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INTRODUCTION

The CANADA PENSION PLAN EMULATOR stores the personal data and earnings record of a contributor to the plan, of the contributor's family members, and optionally also of unrelated persons, and it computes the contributions due by plan members and the benefits to which the contributors and their families are entitled.

Computations follow the legislation in force at the software release date. CPP Emulator Updates may be required in the future.

SYSTEM REQUIREMENTS

The CANADA PENSION PLAN EMULATOR is supplied to run on a PC under *Windows XP* or later version of *Windows*.

PURPOSE AND FEATURES

- Keeps a record of personal data and earnings.
- Computes contributions and benefits
- Computes benefits to family members
- Analyses consequences of
 - early or late retirement
 - income splitting between spouses
 - division of earnings on divorce or separation
 - post-retirement contributions and benefits
- Forecasts benefits
 - under different inflation scenarios
 - simulating amendments to the Plan

PURPOSE AND FEATURES . . .

Following amendments legislated in the year 2011, this version of the CPP EMULATOR has a new feature allowing the determination of a period of post-retirement contributions for a new benefit additional to and separate from all other CPP benefits.

TO INSTALL THE CPP EMULATOR

For the very first installation:

Insert the original CPP EMULATOR in a CD or DVD drive. The installation should start automatically. If not, seek and double-click on the SETUP.EXE file. Ignore Windows messages asking whether or not you wish to install this unrecognized software.

The installation program requests you to indicate the hard disk drive and folder on which you want to install the software, your name, and your address or institutional affiliation. The installation finishes after making CPP EMULATOR files with an icon for the executable file installed from the original disk.

Subsequent installations:

If for any reason it became necessary to re-install the software, it must first be un-installed. The next installation proceeds like the original one but without prompting you for your name and address.

*Installation instructions may change in the future. Consult the *.DOC files on your original disk for up-to-date information.*

TO OPEN THE CPP EMULATOR

Double-click the CPP icon *Program Files*. Wait for a menu and dialog box to appear on the screen.

CUSTOMER SUPPORT

In case of irreparable damage you may request a replacement disk by writing to

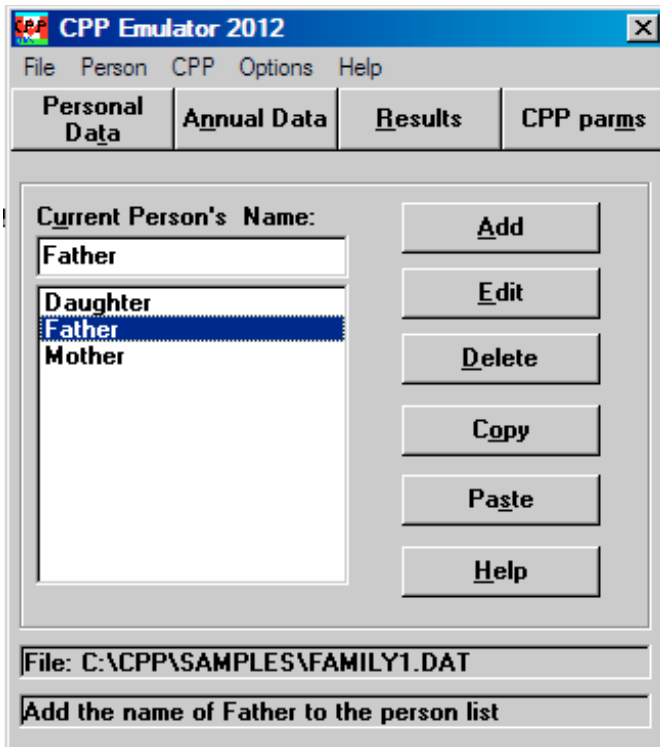
DIA Agency, Inc.
1879 Kingsdale Ave.
Ottawa, Ontario
CANADA K1T 1H9

The charge for a replacement disk is CDN\$ 35.00 plus HST, GST and PST where applicable. The original disk and payment must be enclosed with the request for a replacement.

We can be reached by mail at the address above and by

e-mail: info@DIAgency.ca

CREATING A RECORD



A record consists of personal data including ties to other family members on file, a history of earnings, and other miscellaneous data that affect the eligibility for benefits and the size of benefits.

First, create a person. Then fill the person's record. The person is created in the main CPP EMULATOR window shown above. The record is filled in dialog boxes opened by either selecting menu items or by clicking on buttons in the upper row of the button bar.

CREATING A PERSON

Type the person's name in the Current Person's Name text field (the field above the list that only says "Father") and then click the ADD button.

The list in the box under the current person's name will expand as you add persons.

EDITING A PERSON'S NAME

Select from the list the person whose name is to be edited, changed or corrected. The selection is made by clicking on the person's current name in the lower list. The selected name will then appear in the edit field above. Change the name in the upper text field and then click the EDIT button.

DELETING A PERSON

Select a person in the list and then click the DELETE button. The deletion is final, it cannot be undone.

COPYING AND PASTING A PERSON

The COPY and PASTE buttons are used to copy an entire record. Select a person. Click the COPY button. Open a new file. Click the PASTE button. The selected person's record is copied from the old file to the new file.

THE FILE MENU

Select:

NEW

to erase all records and create a new file.

OPEN

to open a file of contributors' records.

SAVE

to save a file with the path and name shown.

SAVE AS

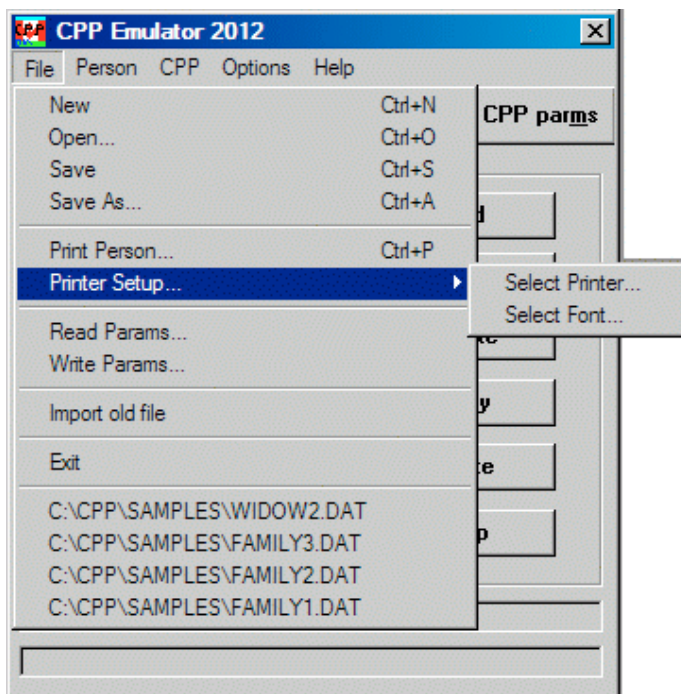
to save a file with a new path and name.

PRINT PERSON

to print all or some parts of records.

PRINTER SETUP

to select a printer and base font.



THE FILE MENU...

READ PARAMS to read a file of CPP parameters. The default file is called **PARAMS.DAT**.
WRITE PARAMS to save user-defined CPP parameters.
IMPORT OLD FILE to open a file created with CPP EMULATOR versions of 1997-2011.
EXIT to quit CPP EMULATOR.

Below the Exit menu item is a list of recently opened files. Click any one of them and it will be opened.

FILLING A RECORD

Records must be filled for every contributor and for every member of a contributor's family. Family members are spouses, former spouses, and children. Records must also be filled for any other persons in the list of persons on file.

Select a person from the list in the CPP EMULATOR window. While that person is selected, select **PERSONAL DATA**. The selections of dialog boxes can be made from the **PERSON** menu or by clicking on the button-bar. Then click on tabs in the personal data dialog box to access and edit different parts of the record.

PERSONAL DATA

CPP Emulator 2012

Set personal data for Father

Disability Assignment Post Retirement

Base Data Family Marriage

☒ Male ☐ Female

Set Dates

Birth: Nov - 1940

Death: July - 1985

Retirement: Jan - 0

Apply OK Close Help

The information requested in the Personal Data dialog box must be complete. The personal data can include two disability periods and four marriage or common law cohabitation periods. There may be no disability, but if there was a second, the first one must have ended. There may have been no marriage, but if there was one, there must be a spouse and, if the union was common law then that must be indicated too.

Pension assignment is optional. When selected, it may result in the sharing of a retirement pension with the spouse.

FAMILY TIES

Click on the Family tab in the personal data dialog box to connect a person to other persons on file. Use drop-down list boxes to select relatives. Select from a list the person that fits the description on the left of the list. If there is no such person then choose [nobody].

CPP Emulator 2012

Set personal data for Father

Disability Assignment Post Retirement

Base Data Family Marriage

Father [nobody]

Mother [nobody]

Eldest child Daughter

Younger sibling [nobody]

Older sibling [nobody]

☒ Automatically associate children

Apply OK Close Help

FAMILY TIES...

When children are connected to parents using this dialog box and **AUTOMATICALLY ASSOCIATE CHILDREN** is checked, then each child will be automatically connected to its siblings and the parents will be connected to the children. Otherwise (when **AUTOMATICALLY ASSOCIATE CHILDREN** is not checked) the user has to make all selections for all persons. *This feature is not recommended unless all of mother's children have the same father.*

THE EARNINGS RECORD

CPP Emulator 2012

File Person CPP Options Help

User data for Father

Edit

Earnings CRDO Cohabitation Schooling

Earnings from employment and self-employment before and after retirement

	1984	1985	1986	1987	1988
TOTAL EARNINGS	25000.00	25000.00	0.00	0.00	0.00
Wages and Salaries	25000.00	25000.00	0.00	0.00	0.00
Self-Employment	0.00	0.00	0.00	0.00	0.00
Post-rtr wages & sal.					

Insert amounts proportional to YMPE

OK Apply Cancel Help

THE EARNINGS RECORD...

Select ANNUAL DATA from the main menu or the button bar to enter the earnings record and other annual data that affect benefits. Click on tabs to access and edit various types of annual data. Click the Earnings tab to change earnings data. Employment and self-employment earnings must be entered separately. Pension benefits are related to an average of all earnings up to retirement.

The screenshot shows a Windows-style dialog box titled "Set personal data for Mr Lee". It has several tabs: "Base Data", "Family", "Marriage", "Disability", "Assignment", and "Post Retirement". The "Post Retirement" tab is currently selected. Inside this tab, there is a section titled "Post-retirement contribution dates:". Below this title, there are two groups of controls. The first group is labeled "Start" and contains a dropdown menu showing "July" and a text box containing "2012". The second group is labeled "End" and contains a dropdown menu showing "Mar" and a text box containing "2014". At the bottom of the dialog box, there are four buttons: "Apply", "OK", "Close", and "Help".

Post-retirement contributions are mandatory up to age 65; From age 65 to 70 they are voluntary. If the person in question does not wish to make voluntary contributions, then do not extend the earnings record beyond age 65 and do not select a date for termination of post-retirement contributions that falls after age 65.

In case of early retirement, and if no post-retirement contribution dates were chosen, such dates are imposed automatically up to age 65.

CHILD-REARING DROP-OUT

When there are children, one of the parents may benefit from a Child Rearing Drop-Out (CRDO). Months of low earnings can be excluded from the calculation of average earnings. The average and the resulting pension is thus increased. In the example below, Mother is eligible for all months up to and including April of 1979. The eligible months are those when a contributor is in receipt of Family Allowance or eligible for Child Tax Benefit in respect of a child under the age of seven. The youngest child in this example turned 7 in April, 1979.

User data for Mother

Edit

Earnings **CRDO** **Cohabitation** **Schooling**

Months eligible for child-rearing dropout (binary format)

	1976	1977	1978	1979	
JFMANJJASOND	111111111111	111111111111	111111111111	111100000000	000000000000

Auto CRDO

OK Apply Cancel Help

If only one parent will claim CRDO in respect of all children (which is the usual case) then it is sufficient to click the AUTO CRDO button to fill the CRDO table.

To create exceptions, indicate with a 12-character 0/1 code the months in respect of which a parent is not or is eligible for CRDO. Transfer of CRDO eligibility from one to another parent is recommended when that other parent is the one who had the lowest income in the corresponding year.

MISCELLANEOUS DATA

Use the Annual Data dialog box also to record months of cohabitation by common law spouses and school attendance by children over the age of 18.

On separation, the division of earnings depends on the length of time during which spouses were married or cohabiting. A precise number of months is required for common law spouses. Enter the number of months in each year of cohabitation. When the spouse and its months of cohabitation are on file then an AUTO SYNC button is provided. Click this button to automatically set a second spouse's cohabitation months equal to the first spouse's.

Children over 18 and under 25 years of age may qualify for benefits if they attend a qualified school. In the example below the daughter turned 18 in 1990 and was not in school when aged 19, 20, and 25.

User data for Daughter

Edit

Earnings **CRDO** **Cohabitation** **Schooling**

School attendance flag (0 or 1)

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1	0	0	1	1	1	1	0	0	0	0	0	0	0	0

OK Apply Cancel Help

RULE CHANGES

The computation of contributions and benefits uses CPP program rules and provisions that are in memory. A default set of program rules and provisions is supplied in the PARAMS.DAT file. The user can choose a different set.

Select CPP PARMS to change the CPP program parameters. Your changes can be saved in a file and that file can be made to replace the default parameters file. See the page on Options.

CONTRIBUTIONS AND BENEFITS

Select RESULTS to compute and display contributions and benefits for all persons on file.

CONTRIBUTIONS

Select **RESULTS** and click on the **Contributions** tab to review the contributions due by the employee and the employer, the **Unadjusted Pensionable Earnings (UPE)**, and the contributory months in every year in the contribution period.

The results shown here are affected by disability commencing in 1995. The bottom table of **Unadjusted Pensionable Earnings** has a second row of divided earnings whenever the current person is divorced or separated and eligible for division of pension credits.

PENSIONS

Click on the Pensions tab to see monthly, annual, and total benefits in dollars and cents. Monthly child benefits, however, are shown in number of benefits payable and the annual amount is that number times a flat rate.

Combined pensions override disability, survivor, and retirement pensions. In the above example, a widow was disabled during the whole of 1987 and her only annual pension in that year was the combined pension. Her monthly disability and survivor pensions are shown for the record but are not payable. When she retires a combined pension will be payable until death when her estate expects the death benefit shown at the bottom of the screen.

Results for Mother

Edit

Pensions

Contributions

Eligibility

Close

Help

	1986	1987	1988	1989	1990
TOTAL ANNUAL PENSION	4707.12	8987.88	5894.39	3541.68	3711.72
Retirement	0.00	0.00	0.00	0.00	0.00
Post-Retirement Benefit	0.00	0.00	0.00	0.00	0.00
Survivor	260.87	271.57	283.52	295.14	309.31
Disability	455.64	622.48	649.87	0.00	0.00
Orphan's benefit	0.00	0.00	0.00	0.00	0.00
Disabled contributor's child	0.00	0.00	0.00	0.00	0.00
Assigned pension	0.00	0.00	0.00	0.00	0.00
Combined pension	486.11	748.99	781.95	0.00	0.00
RETIREMENT	0.00	0.00	0.00	0.00	0.00
SURVIVOR	1304.35	0.00	1984.64	3541.68	3711.72
DISABILITY	0.00	0.00	0.00	0.00	0.00
ORPHAN'S BENEFIT	0.00	0.00	0.00	0.00	0.00
DCCB	0.00	0.00	0.00	0.00	0.00
ASSIGNED PENSION	0.00	0.00	0.00	0.00	0.00
COMBINED PENSION	3402.77	8987.88	3909.75	0.00	0.00
Retirement portion	0.00	0.00	0.00	0.00	0.00
Survivor portion	30.47	271.57	283.52	0.00	0.00
Disability portion	455.64	477.42	498.43	0.00	0.00

Death benefit

2500.00

ELIGIBILITY FACTORS

Click on the Eligibility tab to obtain information about various factors or codes that affect the benefits payable to a contributor and the contributor's eligibility for benefits. In this example the contributor has had no made post-retirement earnings contributions and was therefore not eligible for the new post-retirement contributions and benefit.

Results for Mother

Edit

Pensions **Contributions** **Eligibility**

Contributor's Status

☐ Divided credits
☐ Surviving male

Last Combined: May -- 2008

AAPE

Undivided: 3210.34
Divided: 3210.34

Contributory months

Undivided: 356
Divided: 356

Retirement benefit for calculation purposes

Undivided: 802.59
Divided: 802.59
Survivor: 839.50

Start
Jan -- 1966

End
May -- 2008

Duration
38 years

Contribution Requirements

Contributed for: 29 years

Survivor pension reduction factor
months under age 45 when widowed: 0

Not eligible for post-retirement contributions

Close
Help

The information on this screen may help to explain some computed results. Consult the Glossary about the various values and concepts shown.

THREE SCENARIOS

RETIREMENT

Complete your earnings record by entering probable earnings in the years before and after the normal retirement date. Select **PERSONAL DATA**. Click on the Base Data tab. Select alternative retirement dates. View **RESULTS** to find the effect on your pension of working and contributing after the earliest possible retirement date.

DIVORCE OR SEPARATION

When contemplating divorce or separation, select **RESULTS** for each spouse and note their pensions. Then let the separation take effect. Select **PERSONAL DATA** for each spouse, click the Marriages tab, and enter the marriage-end date in each spouse's record. Return to **RESULTS** to see the effect that division of earnings has on the pensions payable after divorce or separation.

When contemplating a separation agreement by which the parties renounce their rights to division of earnings, their decision can be made effective by annulment of the marriage or cohabitation. Delete the marriage and separation dates from the records. Change spouses' names to "nobody."

INCOME DISTRIBUTION

You are a self-employed business person and employ your spouse. Your business has an extra \$1,000.00 to distribute. Who should get that \$1,000? You, your spouse, or will you share it? Make various alternative changes to your earnings records and view the resulting pension amounts. You may find that identical combined contributions in respect of the \$1,000 earned have different impacts on the sum of your pensions. The sum may be larger if your income distribution favours the low-income spouse, the one with the fewest years of work, or the one with the most months of child-rearing.

FORECASTING

Select CPP PARMS to show the dialog box below and to use it to set future contribution rates and monetary values indexed to inflation. The user can set future contribution rates, future flat rate benefits, and also the future YBE, YMPE and PI.

Historical and Projected CPP Parameters in file params12.dat

Edit

Annual Dollar Values Constants

Year	Maximum RTR-FBC	Death Benefit	Disability flat rate	Survivor flat rate	Child Benefit	GI Drop-out % months	Actuarial Early
1999	751.67	2500	339.80	132.58	171.33	0.15	0
2000	762.92	2500	345.24	134.70	174.07	0.15	0
2001	775.00	2500	353.87	138.07	178.42	0.15	0
2002	788.75	2500	364.49	142.21	183.77	0.15	0
2003	801.25	2500	370.32	144.49	186.71	0.15	0
2004	814.17	2500	382.17	149.11	192.68	0.15	0
2005	828.75	2500	388.67	151.64	195.96	0.15	0
2006	844.58	2500	397.61	155.13	200.47	0.15	0
2007	863.75	2500	405.96	158.39	204.68	0.15	0
2008	884.58	2500	414.08	161.56	208.77	0.15	0
2009	908.75	2500	424.43	165.60	213.99	0.15	0
2010	934.17	2500	426.13	166.26	214.85	0.15	0
2011	960.00	2500	433.37	169.09	218.50	0.15	0

Project inflation

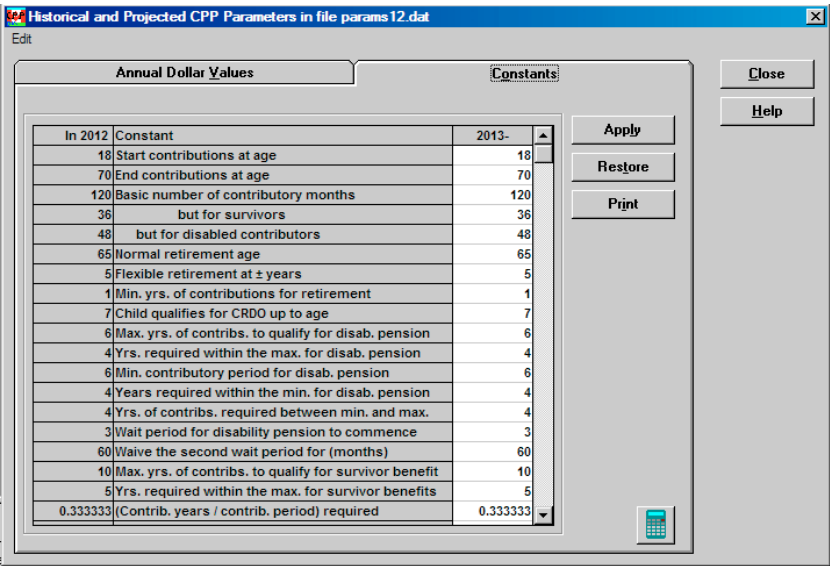
Wage growth: 0.015 OK

Price inflation: 0.02 Cancel

Apply Restore Print

The values can be changed individually and selectively by selecting spreadsheet cells and typing new values. An automatic, wholesale change can be made for all future years and for all columns that hold values adjusted to inflation by projecting inflation. In the example above, the average industrial wage is projected to grow at 1.5 per cent per year and the consumer price index is set to grow at 2 per cent per year. Click OK in the Project inflation frame to accept this change. Click the OK changes button to make the change effective in pension calculations. Click the Restore button to undo the changes. Select Write Params in the main File menu to save the new forecasts.

CPP CONSTANTS



Click the Constants tab to change various parameters that affect the contributions and benefits. Click on the OK button to make the changes take effect in computations. Consult the Glossary about the meaning of each item in this dialog box. See also the section on effective dates.

EFFECTIVE DATES

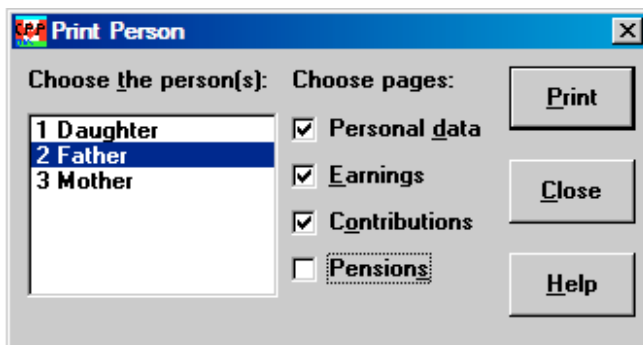
In general, new parameter values apply to events that occur after a cut-off date. For example, a new wait period applies when a person is disabled after the cut-off date. Exceptions to this rule are made when the event itself depends on the value of a CPP parameter. For example, if the contributory period start were changed from age m to age n after year t , then the period starts at age n for every person who reaches that age after t , otherwise it continues to start at age m .

EFFECTIVE DATES...

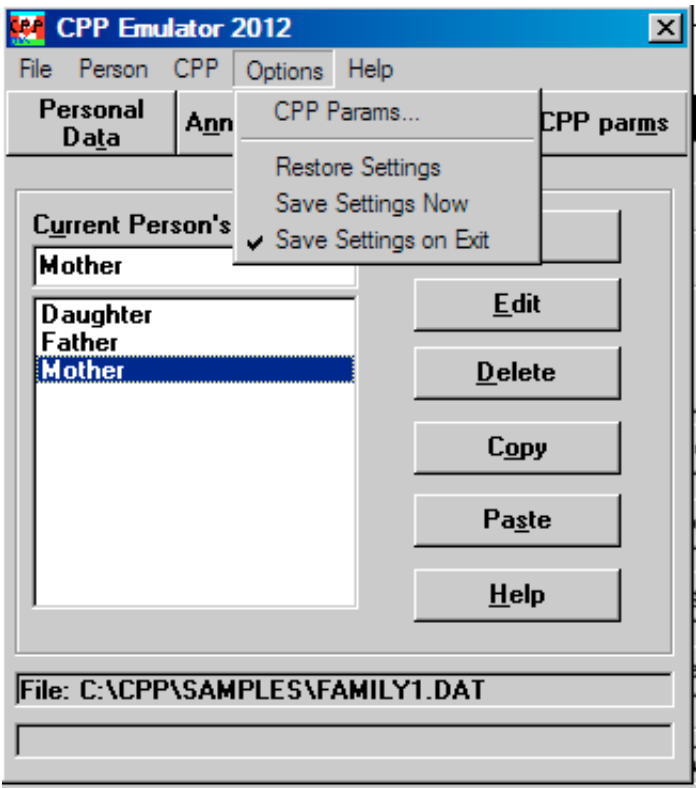
DIA Agency, Inc. will entertain requests for custom programming of other effective date rules.

PRINTING RECORDS

The user can print the record of any or all persons on file. The user can also select the parts of each record to be printed. In the example below, only the father's record will be printed and his pensions are excluded. Use Ctrl-Click in the list box to include other family members. Click on Pensions to check-mark that part of the record and print it too.



OPTIONS



Select OPTIONS to select a new CPP parameters file as the default file in place of the PARAMS.DAT file supplied with the CPP EMULATOR. The settings you choose can be saved immediately or saved on exit. SAVE SETTINGS ON EXIT can be toggled on and off.

GLOSSARY

This glossary is loosely worded for the sake of brevity.

AAPE

average monthly pensionable earnings adjusted for change in the AVYMPE. The monthly *pensionable earnings* are those included in the count of TCM.

Actuarial adjustment for flex rtr (per month)

Fraction by which a retirement pension is reduced (increased) for every month before (after) the contributor's *normal retirement age*.

Adjusted pensionable earnings

Pensionable earnings adjusted for inflation according to the rise in the YMPE.

Average adjusted pensionable earnings

See AAPE

AVYMPE

Moving average of the YMPE used to adjust pensionable earnings to inflation.

Basic number of contributory months for disabled contributors

The minimum number of months in a contributor's *contributory period* used to compute the AAPE for computation of a disability pension. Drop-outs cannot reduce this number of months.

GLOSSARY...

Basic number of contributory months

The minimum number of months in a contributor's *contributory period* used to compute the *AAPE* for computation of a retirement pension. Drop-outs cannot reduce this number of months.

Basic number of contributory months for survivors

The minimum number of months in a contributor's *contributory period* used to compute the *AAPE* for computation of a survivor pension. Drop-outs cannot reduce this number of months.

Child benefit

Flat-rate benefit payable to a qualifying orphan and/or child of a disabled contributor.

Child qualifies for benefit up to age

Age in years at which a child of a deceased contributor ceases to qualify for an orphan's benefit *and also* the age at which a child of a disabled contributor in receipt of a disability pension ceases to qualify for a *DCCB*.

A child continuously disabled from the date of the parent's death remains qualified for its orphan's benefit.

Child qualifies for CRDO up to age

Age of a child after which the parent in receipt of Family Allowance or eligible for Child Tax Credit can no longer claim *CRDO* in respect of that child.

GLOSSARY...

Child qualifies for benefit, when in school, up to age
 Age in years up to which a child may continue to qualify
 for child benefits if enrolled at a recognized educational
 institution.

Child rearing drop out See CRDO

Cohabitation period
 Number of months during which spouses must have
 cohabited to qualify for *division of earnings* upon divorce
 or separation. Special rules for short periods of
 separation (e.g. by reason of work and travel) are not
 considered by the CPP EMULATOR.

(Contrib. years / contrib. period) required:
 see *MQP for survivors*

Contribution requirements
 See *Minimum qualifying period*

Contributory months
 The number of months in the *contributory period* during
 which a contributor can be liable for contributions.
 This number excludes months while disabled *and*
 eligible for a CPP disability pension and the number of
 months while without pensionable earnings *and* eligible
 for CRDO.

Contributory period
 The period during which a person employed or self-
 employed in Canada is liable for CPP contributions.
 Special rules for Canadian employment abroad are not
 considered by the CPP EMULATOR.

GLOSSARY...

CPP parameters

The values of items discussed in this glossary. The default values applicable at the CPP EMULATOR release date are stored in file PARAMS.DAT. The user can create a file with alternative values and select OPTIONS|CPP Params to make the CPP EMULATOR use the alternative file.

CPP rate

Total contributions by the employer and the employee as a percentage of *pensionable earnings*.

CRDO

The child-rearing drop out. In a first pass, the contributor must drop out all months in which the contributor had no *pensionable earnings* and was eligible for the CRDO. In a second pass, the contributor may drop out months in which *adjusted pensionable earnings* were below the AAPE and in which the contributor was eligible for CRDO.

DCCB

Disabled contributor's child benefit payable to an eligible child of a contributor in receipt of a CPP disability pension.

Death benefit

One-time payment to the estate of a deceased contributor eligible for survivor benefits.

GLOSSARY...

Disability

A physical or mental impairment that is both severe and prolonged. Severe means that the contributor is unable to pursue a regular, gainful employment and prolonged means that the disability is of indefinite duration or is likely to result in death.

Disability flat-rate

Flat-rate portion of a disability pension

Divided credits

A flag indicating that the contributor has shared pension credits with a former spouse.

Earnings

All earnings from employment or self-employment before all deductions from employment income.

Eligible for unreduced survivor's pension at age

Age beyond which a survivor under the *normal retirement age* can receive a retirement pension that is not reduced by reason of the survivor's age.

Eligible for reduced survivor's pension at age

Minimum age at which a survivor can qualify for a survivor's pension even if the survivor is neither disabled nor without eligible children in its care.

Employer share in contributions

Fraction of monthly CPP contributions contributed by employers on behalf of their employees and by self-employed persons on behalf of themselves.

GLOSSARY...

End contributions at age

Age at which the contributory period must end. The last month in the *contributory period* is the month before this age is reached.

Family

A *person's* children and parents. The CPP EMULATOR makes no special provision for adopted children.

Flexible retirement at $\pm$ years

Number of years by which a contributor can choose to retire before or after the *normal retirement age* and the number of years on which the *actuarial adjustment* of the retirement pension can be based.

Fraction of rtr. pension incl. in full <65 survivor pension

This fraction determines the earnings-related portion of a survivor pension payable to survivors under their *normal retirement age*.

Fraction of rtr. pension incl. in disability pension

This fraction determines the earnings-related portion of a disability pension.

Fraction of rtr. pension incl. in survivor 65+ pension

This fraction determines the earnings-related portion of a survivor pension payable to persons above their *normal retirement age*.

GLOSSARY...

Fraction of rtr. pension incl. in death benefit

This fraction determines the size of the death benefit but the final result can be restricted to a maximum death benefit.

General dropout of low earnings %/100

Determines the number of months in which the contributor had below-average *adjusted pensionable earnings* and that can be excluded from the calculation of the AAPE. This drop-out cannot reduce the total number of months used in the calculation below a *basic number of months*.

Last combined

Date at which a current combined pension commenced.

Marriage

A legal or common law marriage eligible for division of earnings and/or for survivor benefits. See *Min. months of cohabitation* for division and survivors.

Maximum pension

Maximum retirement pension payable to an eligible contributor who retires at the *normal retirement age* and who has earned the maximum possible AAPE. For years before 1976 it is the maximum payable when the pension payments commence in December.

Max. yrs. of contribs. to qualify for disab. pension

See *MQP for disability pension*.

GLOSSARY...

Max. number of DCCB/ORP benefits per child

Maximum number of child benefits that a child can receive in one and the same month.

Max. yrs. of contribs. to qualify for survivor benefit

See MQP *for survivors*

Min. yrs. of contributions for retirement

See MQP *for retirement*

Min. contributory period for disab. pension

See MQP *for disability*

Min. contrib yrs. for survivor benefit

See MQP *for survivors*

Min. months cohabitation for survivors & division

The minimum number of months during which former spouses must have cohabited to be considered married.

Minimum qualifying period

See MQPs

Months under age 45 when widowed

The number of months between the date of survivor pension entitlement or re-computation and the date when the survivor reaches the age beyond which survivor pensions are no longer reduced by reason of age.

MQP Minimum qualifying period.

GLOSSARY...

MQP for disability pension

i) Contributions must have been made in at least Yrs. *required within the max. for disab. pension* of the last *Max. yrs. of contribs. to qualify for disab. pension*

OR

ii) where the number of calendar years included wholly or partly within the Contributory Period are fewer than *Max. yrs. of contribs. to qualify for disab. pension*, contributions must have been made for at least Yrs. *required within the max. for disab. pension*

OR

iii) Contributions must have been made in *Years required within the min. for disab. pension* of the last *Min. contributory period for disab. pension* years included wholly or partly within the Contribution Period

OR

iv) Where there are only *Years required within the min. for disab. pension* contributory years included either wholly or partly in the Contributory Period, then contributions must have been made in all such years.

MQP for retirement pension

The number of years in which contributions must have been made to earn a retirement pension.

MQP for survivor benefits

the deceased contributor must have made contributions for

a) at least *Yrs. required within the max. for survivor benefits* calendar years and at least (*Contrib. years / contrib. period*) *required* of the total number of calendar

GLOSSARY...

years included wholly or partly in the Contributory Period

OR

b) for at least *Max. yrs. of contribs. to qualify for survivor benefit* calendar years.

Normal retirement age

The age at which a retirement pension can be paid without *actuarial adjustment* for early or late retirement.

Pension assignment

Up to $\frac{1}{2}$ of a retirement pension can be assigned to the spouse. The precise amount depends on the length of the legal or common law marriage and on the length of the spouse's *contributory periods*. Both spouses must be at or over the age at which they qualify for early retirement and must have applied for the retirement pensions for which they are eligible.

Pensionable earnings

Employment and self-employment earnings of the year that are above the YBE for the year and excluding the amount over the YMPE for the year.

Pensions

Retirement

payable until death of an eligible contributor.

Survivor

payable until death of the surviving spouse of an eligible contributor.

GLOSSARY...

Disability

payable to an eligible contributor after a waiting period and until death, retirement, or recovery, whichever is earlier.

Orphan's benefit

payable to an eligible child of a deceased contributor eligible for survivor benefits.

Disabled contributor's child benefit

payable to an eligible child of a disabled contributor in receipt of a disability pension.

Assigned pension

Amount of the retirement pension that results from sharing of pensions by spouses of retirement age.

Combined pension

Replaces pensions of a surviving spouse entitled to either disability or retirement pension.

Retirement portion

The part of a combined pension available for assignment.

Survivor portion

Part of a combined pension.

Disability portion

Part of a combined pension that will cease when the disabled contributor reaches retirement age.

Person

In this CPP EMULATOR, any contributor and any contributing or non-contributing member of the contributor's *family* including current and former spouses.

GLOSSARY...

Reduction factor for reduced pension, per month

Factor by which a survivor pension can be reduced for every month by which the survivor is under the age beyond which age is no longer a factor.

Replacement ratio

The fraction of *average adjusted pensionable earnings* that is payable as a retirement pension upon retirement at the *normal retirement age*.

Retirement date

A valid retirement date chosen by the contributor. The retirement pension becomes payable in the month after this date.

RTR_FBC

The retirement benefit for pension calculations equal to *replacement ratio* times the *AAPE*

Section 51(B)

Age after which a still disabled contributor's *RTR_FBC* is indexed up from the value it had at the onset of disability instead of being computed normally.

Section 58(2) (a) (ii) (A) (I)

The fraction of the earnings-related portion of its surviving spouse's pension that a surviving spouse may lose on application for a combined pension.

GLOSSARY...

Section 58(2) (a) (ii) (A) (II)

The fraction of a retirement pension without actuarial adjustment that a surviving spouse may lose on application for a combined pension.

Section 58(2) (b) (i) (A) (I)

The fraction of the surviving spouse's pension that a retired contributor may lose on application for a combined pension.

Section 58(2) (b) (i) (A) (II)

The fraction of its retirement pension that a surviving spouse may lose on application for a combined pension.

Section 58(6) (B)

The fraction of the earnings-related portion of either a surviving spouse's or a disabled contributor's pension that a disabled contributor may lose on application for a combined pension.

Spouse

a legal or common law spouse of the contributor.

Start contributions at age

Age at which the contributory period must start. The first contributory month is the birthday month or January, 1966, whichever is later.

Surviving male

A flag indicating that the survivor was disqualified from receiving a survivor pension by reason of not having been disabled and supported by the deceased *spouse*.

GLOSSARY...

Survivor flat-rate

Part of the survivor pension payable to a survivor under the *normal retirement age* and liable to reduction by reason of low age.

Survivor pension reduction factor

See *Reduction factor for reduced pension, per month*

TCM

Total number of *contributory months* retained in the pension calculation after all drop-outs and after *substitution of earnings after the normal retirement age*.

Total contributory months

See TCM

Unadjusted pensionable earnings

See UPE

UPE

Employment and self-employment income of the year above the YBE for the year and excluding the amount in excess of the YMPE for the year.

Wait period for disability pension to commence (mos.)

Number of months between onset of disability and commencement of a disability pension. If the wait period is 3 and disability started in May, the disability pension is payable not in June but in September.

The wait period is waived in the case of a second disability that commences in less than *Waive the second wait period for (months)* after the end of the first disability period.

GLOSSARY...

Waive the second wait period for (months)

Number of months after the end of a first disability period and after which a *wait period* again applies.

Year of contributions

A contribution for a calendar year is interpreted to mean a valid contribution during one or more months in a year. A contribution is valid if after final adjustment on the contributor's income tax return the contributor has *UPEs* for the year.

Years required within the min. for disab. pension

See *MQP for disability*

YBE

An amount deducted from annual earnings in the computation of contributions or Year's Basic Exemption. For the first and last year in the contributory period, the YBE is pro-rated to the number of contributory months in the year.

YMPE

The Year's Maximum Pensionable Earnings. No contributions are due in respect of earnings in excess of this amount. For the first and last year in the contributory period, the YMPE is pro-rated to the number of contributory months in the year.

Yrs. of contribs. required between min. and max.

Not yet used by the CPP in *MQP for disability*

GLOSSARY...

Yrs. required within the max. for survivor benefits

See *MQP for survivor*

Yrs. required within the max. for disab. pension

See *MQP for disability.*

SAMPLE FILES

Sample files were created for internal use to test the software and for external users to illustrate the benefits receivable by contributors to the CPP in various circumstances.

5KIDS.DAT

Abe O'Connor and Rachel are married. They have four daughters and one son, April, May, June, Julie and August. Abe died in 1969 at the age of 39. Rachel died at 48 in 1985 without having made contributions. In 1972, April married Julius Romano. Her cousin, Benjamin O'Mallon, died at 15 in 1975.

AKL_TEST.DAT

John Smale and Sally Crash were married in 1965. They had a child, Orphan Smale born in 1970. Sally Crash died in 1971. In 1977 John Smale married Kim Young, who had three children from a former relationship: Bobby, Jane and Alice Former. John and Kim Smale had 3 more children: John Smale jr., Margie and Benjamin. John Smale died in 1988, when Kim married Jim Smart in 1990.

ALL1YEAR.DAT

He retires in September and dies in November, 1997, after his wife had died in May of that same year.

ASS_COMB.DAT

Jack and Jill were married. Jack died in October, 2000. Jill married John, in June, 2001, retired in July, 2004, assigned her pension to John in June, 2008, and died in October, 2009. John had been married to Jane, who died in July, 2000. John retired in September 2005 and died in September 2010.

SAMPLE FILES...

CH5_1_16.DAT

She retired in March 1984 and died in January 1988. Her children died in January 1980. She had earned child-rearing drop-outs.

COUPLE1.DAT

He retired in 1990 and died in 2005. She died in 1994 and had a daughter born 1881.

COUPLE2.DAT

He retired in 1990 and died in 2005. She retired in 2014. They were divorced in 1989 after having a daughter in 1981.

COUPLE3.DAT

He was disabled from 1987 until he retired in 1990 after a divorce in 1989.

COUPLE4.DAT

He was disabled from 1987 until he retired in 1990, and she died in 1989.

COUPLE5.DAT

He died in 1982, before his retirement age. She was disabled from 1985 to 1988.

COUPLE6.DAT

He retired in 1990 and died in 2005. She had no earnings, retired in 1992 and died in 2008. They had been divorced when she retired in 1992.

COUPLE7.DAT

He retired in 1993 and died in 2005. She had no earnings, retired and was divorced in 1995, and died in 2008.

SAMPLE FILES...

COUPLE8.DAT

He retired in 1987 and died in 2005. She had no earnings, retired in 1989, at the time when she was divorced.

COUPLE9.DAT

He died in 1989, before retirement. She had earnings and retired in 1988.

COUPLE10.DAT

He died in 1989 before retirement. She had earnings and retired in 1988. There is a difference in the number of months that she contributed.

COUPLE11.DAT

She retired in November, 1990, after he had retired in March of that year.

COUPLE12.DAT

She retired in September 1889, he retired in March, 1990, and they divorced in April, 1990.

COUPLE13.DAT

He died in 1980 when she was under the age of 45 and without children. Her survivor pension starts at age 65.

COUPLE14.DAT

He dies in 1982 leaving a widow with two minor children. Monthly orphan's benefits are displayed as number of months in receipt of benefit and annual total dollar amount of benefits.

SAMPLE FILES...

DIVORCES.DAT

Star retires in 2005 and dies in 2015. He divorced Spouse 1 in April, 1980; married Spouse 2 in June, 1981, and divorced in April 1990; married Spouse 3 in June 1991, and divorced in April 2000; married Spouse 4 in June 2001, and was survived by her.

DSBMQP98.DAT

Father marries in 1998, divorces in 2006 and dies in 2011. Mother began to have earnings in 1998 but was disabled from 2007 until her death in July, 2010. The child was born in 1999 and died in 2008.

FAMILY1.DAT

Father died in 1985. Mother was disabled from 1986 to 1988 and retired in 2008. A daughter was born in 1972 and attended school until 1996, except 1991 and 1992.

FAMILY2.DAT

The father died in July, 1985. Mother was disabled from 1986 until retirement in 2008. A daughter born in 1965 was in school for 35 months until she died in 1988. The baby in the family was born in 1968 and was in school in 1988.

FAMILY3.DAT

The father and mother were in the same situation as in the previous case. The elder daughter died in 1987. The younger daughter was born in June, 1986, and did not attend school.

MR_LEE.DAT

Mr. Lee retired in June, 2012 but continued to work while retired until March, 2014, during which time he was obliged to

SAMPLE FILES...

make contributions. He died in 2020. His partner died at age 64 in 2026 without having retired. He received a survivor pension not affected by Lee's post-retirement benefit.

Mr. and Mrs. Brown both earned at the maximum pensionable level. Mr. Brown retired in 2009 and died in 2012 after making contributions for the whole of 2012. The contributions he made post-retirement earned no benefit in 2013, because he had died in 2012. Mrs. Brown retired in 2010 and died in 2014.

Johnny Crash is a long-term contributor who, when he became disabled, benefited from the 2007 amendment requiring only 3 years of contributions during the last six years.

PERSONS.DAT

Person 1 was single, was disabled for some time, retired at age 65 and died. The situations of Persons 2 and 3 were similar to those of Person 1 except for their late and early retirement, respectively. Person 4 had a shorter disability period. Person 5 was very young when disabled and remained disabled until retirement at 65. Person 6 was neither married nor disabled but had a child that died at the age of 5.

SMALE.DAT

The female Spouse had earnings until she died in 1971 without children. The surviving husband was disabled from 1971 until he died in 1977.

TEST_MQP.DAT

The mother was disabled from 1985 until she died in 1990. The child gets benefits until her 18th birthday.

SAMPLE FILES...

TESTCOMB.DAT

He died in May 1990. She had earnings, made contributions, retired in October and died in November, 1990.

WIDOW2.DAT

He died in May, 1982. She had earnings until 1981 inclusive. Her child was born in July, 1982, and died in February, 1988. In June 1984 She married Second, divorced him in March, 1986, and died in July, 1990 after marrying Third in February, 1987 Third died in March, 1988, before he could retire.

For further details, please refer to the SAMPLES\SAMPLES.TXT file.

HELP

Press the F1 key for context-sensitive Help.

If operating this CPP EMULATOR under Windows 7, get from Microsoft their file WinHlp32.exe and install it to enable the help feature.

Use A5 paper to print this manual.

A WORD ON THE CANADA PENSION PLAN

The Canada Pension Plan (CPP) is the only Defined-Benefit Plan available to all Canadians. As such, it is not comparable to Defined-Contribution Plans and yet far superior to them because, apart from being a plan for pension saving, it is rather a comprehensive insurance policy.

A contributor to the CPP and his family are insured against loss of income due to maternity, unemployment or under-employment; loss of income due to the contributor's disability; disability or death of a parent; death of a spouse; and uncertainty about the length of the contributor's retirement period.

The General Drop-Out provision is the insurance for loss of income due to unemployment and even to spells of reduced income when under-employed. The Child-Rearing Drop-Out insures against loss of income due to maternity. In case of disability of a contributor, there are pensions payable to the contributor and his under-age children. In case of death of the contributor, there are pensions payable to the surviving spouse and under-age children. Finally, retirement pensions are annuities payable for life that may continue beyond the date when funds accumulated in an alternative defined contribution plan could have been exhausted.

Because of these many forms of insurance built into the CPP, any computation of a rate of return to the contributor is unwise and improper unless it is made after deduction from CPP contributions what would have to be paid in separate insurance premiums to supplement other pension saving with the insurance coverage mentioned above.

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