

## Hca '7fi ]gY'i bX'7i VU'; ccX]b[ '\f'. K ]YXYfgY\Yb']b'7UbbYg'bUW\'' \$'\\J\fYb'

Hca '7fi ]gY'i bX'7i VU'; ccX]b['f"'fYi b]YfhYb'g]W\']b'7UbbYg &\$&) 'VY]'XYf'DfYa ]YfY'j cb'/ ei ch/A ]gg]cb. a dcgg]V'Y/ ei ch/!'9]b'6']W\_'Ui Z']\fY'VYfØ\a hY Ni qUa a YbUfVY]h"



 $\label{eq:local_substitution} $$ \frac{1}{2} \cdot - \frac{1}{2} \cdot \frac{1}{2} \cdot$ 

## $F \varnothing W_V^* W_U^* Ui Z^* > Yffm^* A U[i]fY$

%ffm'A U[i]fY 'k Uf'b]Wkh'bi f'Y]b'A Y]`YbghY]b']b'XYf'? Uff]YfY'XYf
VY]XYb'GWkUi gd]Y`Yfž'gcbXYfb'XYf': ]`a 'V`Y]Vh'Ui Wk'\_i `hi fY``
fY`Yj Ubhž'k Ug'X]Y': fYi XY'ØVYf'XUg'K ]YXYfgY\Yb']b'7UbbYg'bcWk
j YfghÀf\_hY'''K À\fYbX'XYf'DfYa ]YfY'k i fXYb'X]Y'VY]XYb'?c``Y[Yb
VY]a '@ÀWkY`bž'6Y[fØ» Yb'i bX'I a Ufa Yb'Ui Z'XYa 'fchYb'HYdd]Wk
Zchc[fUZ]Yfhž'k Ug'X]Y': fYi XY'ØVYf']\fY'K ]YXYfj YfY]b][i b[
i bhYfghf]Wk''

 $5 ``YfX]b[g'\_Ubb'; ccX]b[' \not="b]WXh'bi f'Ui Z'dcg]h]j Y'GWX`U[nY]`Yb ni fØW_V`]W_Yb''' \not= b'XYb'`YhnhYb' \not= JYb'gcf[hY'Yf'a]h'a Y\fYfYb G_UbXU`Yb'ZØf'5i ZgY\Yb''' & & &' ghUbX'Yf'Ui Z[fi bX'j cb JYf[Yk U`h][i b[gj cfk ØfZYb'j cf'; Yf]WXhz'XcWX'XYf'DfcnYgg'k i fXY `Yhnh`]WX'Ui ""Yf[Yf]WXh`]WX'VY][Y`Y[h''' \neq :: fØ\'U\f' & & &' VY_UbbhY g]WX'; ccX]b[' \not= "gWXi X][z'Y]bY'?Y``bYf]b'c\bY'XYfYb 9]bj YfghÀbXb]g'[Y_Øggh'i bX']b'nk Y]'k Y]hYfYb': À``Yb': fUi Yb VY[fUdgWXh'ni '\UVYb'' 8]YgY'J cfZÀ``Y'ØVYfgWXUhhYhYb'gY]bY FØW__Y\f']b'X]Y'`OZZYbh`]WXY'K U\fbY\a i b[''$ 

## Gh]a a i b[gj c``Y'9f]bbYfi b[Yb

8]YgY'FØW\_\_Y\fini fi: ]`a k Y`hii bX'X]Y'Y\fYbXYb'9f]bbYfi b[Yb'Ub j Yf[Ub[YbY'9fZc`[Y'nY][Ybž'XUggžii bUV\Àb[]['j cb'XYb < YfUi gZcfXYfi b[Ybž'X]Y']a 'dYfgÒb`]W\Yb'@YVYb'Ui ZhfYhYbž'X]Y A U[]Y'j cb'?]bc'i bX': fYi bXgW\UZh'k Y]hYf\]b'VYghY\Yb'V`Y]Vh''

8YhU]`g	
Cfh	7UbbYgž: fUb_fY]WX
Ei Y``Yb	• k k k "[ U`U"XY
	• k k k "mU\cc"Wca

6Ygi WXYb G]Y i bg Ui Z b!U[ "XY