## Hfi a d/ \_ \$' - /g` \* \$\$A `K ]bXZU``. '7 fmd hcž; c`Zž`UbX`I 59`7cbbYWh]cbg`9IdcgYX°



8cfu`ž: `cf]Xuži b]hYX GhUhYg'! #ng'bc'gYWfYh'h\Uh'Zcfa Yf
DfYg]XYbh'8cbu`X' > "Hfi a d'fYa U]bg'U'\YUX`]bY!a U\_Yf'`cb['UZhYf
`YUj ]b['cZZ]WY'' < ]g'`UhYgh'Z]bUbW]U``X]gWcgi fYg'fYj YU`'U'ghU[[Yf]b[
]bWca Y'cZ'cj Yf'` \*\$\$ 'a ]``]cb'Zcf'h\Y'&\$&('WU`YbXUf'mYUfž
Vc`ghYfYX'Vm'U'a ]I 'cZ'WfmdhcW' ffYbWmj Ybhi fYgž'[c`Z'fYgcfh
fYj Ybi Ygž'UbX'`i WfUh]j Y'`]WYbg]b['U[fYYa Ybhg"'5WWcfX]b['hc'
HYWX Ghcfmž'h\Y'Hfi a d'ZUa ]`mg'XYWYbhfU`]nYX'Z]bUbWY'j Ybhi fYž
K cf`X'@]VYfhm': ]bUbW]U`ž'\Ug'd`UmYX'U'Wfi W]U``fc`Y']b'h\]g'Z]bUbW]U`
gU[Už'fU\_]b[']b'a cfY'h\Ub'` (\$\$ 'a ]``]cb']b'ZYYg"

 $\label{thm:wcadcbYbhg:cZ'Hfiadg'Z]bUbW]U`gi WWYgg']g'h\Y'`HFIAD'aYaY'Wc]bž'k\]WX'U`cbY']g'Ygh]aUhYX'hc \Uj Y'[YbYfUhYX'UfcibX'`'&$`a]``]cb']b'ZYYg'''K]h\'hchU`'\c`X]b[g$ 

UggYggYX'Uh'Ufci bX'`%"\*'V]``]cbž'Hfi a d g'Z]bUbW]U`'Ya d]fY ]bWi XYg']bj Ygha Ybhg']b'a YX]Už'[c`Zž'UbX'j Uf]ci g'Wcbgi a Yf [ccXg"'GdYW]Z]WU``mž'\]g'A Uf!U!@U[c'UbX'ch\Yf': `cf]XU'dfcdYfh]Yg Vfci [\h']b'i dk UfXg'cZ'`&%+"+'a ]``]cbž'a U\_]b['Hfi a d'BUh]cbU` 8cfU`'h\Y'Wfck b'Yk Y`'k ]h\'`%%\$"('a ]``]cb']b'fYj Ybi Y"

## $7 \text{ fmd hc 'J Ybhi fYg 'UbX '9h\ ]WU``7cbWYfbg$

H\Y'Hfi a d'ZUa ]`mg']bj c`j Ya Ybh']b'WfmdhcW' ffYbWm']g'gh]ff]b['i d Yh\]WU`X]gW' gg]cbg"'F Ydcfhg']bX]WUhY'h\Uh'K cf`X'@]VYfhm': ]bUbW]U`]g'k cf\_]b['hc'`Ui bW\'U'Xc``Uf!VUW\_YX'ghUV`YWc]bž'l G8 %ž'k \]W\']g gYh'hc'VY'gi ddcfhYX'Vm'l "G"'HfYUgi f]Yg'UbX'WUg\'Yei ]j U`Ybhgž'Ug XYgWf]VYX'Vm'567'BYk g"'H\]g']b]h]Uh]j Y']g'VUW\_YX'Vm'U'a Ugg]j Y &V]``]cb']bj Ygha Ybh'Zfca 'U'ghUhY!VUW\_YX'5Vi '8\UV]'Z]fa ž'A; Lž]b'Wfmdhc'Yl W\Ub[Y'6]bUbW'ž'k]h\'K cf`X'@]VYfhm': ]bUbW]U`g ]bj c`j Ya Ybh'i bXYfgWcf]b['XYYdYb]b['h]Yg'VYhk YYb'h\Y'Hfi a d ZUa ]`m'UbX'; i `Z']bj Ygha Ybhg"

9I dYfhgʻUfYʻgci bX]b[ʻUʻUfa gʻcj YfʻdchYbh]UʻʻWcbZ]WhgʻcZʻ]bhYfYghʻʻ7f]h]Wgʻdc]bhihcʻ\ckʻdfcZ]hgʻUddYUf]b[ʻhcʻghYaʻZfcaʻHfi a d g dfYg]XYbWmʻa ][\hiZcfYg\UXckʻZi hi fYʻdcʻ]Wmʻ]bZi YbWYgžYgdYW]Uʻʻm []j Ybʻh\YʻX]fYWhʻWcbbYWh]cbgʻhcʻZcfY][bʻYbh]h]YgʻʻH\YʻK\]hYʻ<ci gY a U]bhU]bgʻh\UhʻHfi a d gʻVi g]bYggʻUZZU]fgʻUfYʻa UbU[YX'h\fci [\'Uhfi ghʻVm`\]gʻW\]`XfYbžʻUggYfh]b[ʻh\UhʻbcʻWcbZʻ]Wh'YI ]ghgʻʻMYhž g\_Ydh]W]gaʻʻ]b[YfgʻUa cb[ʻgca YʻʻUk a U\_YfgʻUbXʻh\Yʻdi V`]Wʻ

## =bhYfbUh]cbU`'8YU`g'UbX': i hi fY'DfcgdYWhg

5g'Hfi a d'`cc\_g'hc'Yl dUbX'\]g'Zcchdf]bh']bhYfbUh]cbU``mž\]g dfc'YWhg']b'h\Y'l b]hYX'5fUV'9a ]fUhYg'UfY'bchYk cfh\m''H\Y'Hfi a d Cf[Ub]nUh]cb']g'fYdcfhYX`m'XYj Y`cd]b['Hfi a d'Hck Yf'8i VU]ž'Ub Ua V]h]ci g'`i l i fm'hck Yf'hc'VY'Wca d'YhYX'Vm'&\$' %"'FYdcfhg'Vm' BYk gk YY\_'Y`UVcfUhY'h\Uh'h\YgY'j Ybhi fYg'fYZYWh'U'VfcUXYf dUhhYfb'cZ'Hfi a d'ZUa ]`m'Vi g]bYgg'UWh]j ]h]Yg'WcgY`m'`]b\_YX'hc'h\Y I 59ž'U'g][b]Z]WUbh'U``m'Xi f]b['Hfi a d g'dfYg]XYbWh'

9f]WHfi a d'UbX'NUW\'K ]h\_cZZ'\Uj Y'VYYb'j cWU``UVci h'h\Y]f'd`Ubg Zcf'K cf`X'@]VYfhm': ]bUbW]U`ž'UbX']bX]WUh]j Y'cZ'h\Y]f'Ybh\i g]Uga ž

h\Ym'fYWYbh`m'dUfh]W]dUhYX']b'U'Wfmdhc'WcbjYbh]cb']b'8iVU]'hcVc`ghYf'h\Y]f'jYbhifYg'dfcZ]`Y"'H\Y'd`Ub']g'WYUf.'h\Y'IG8%ghUV`YWc]b'U]ag'hc'dfcj]XY'U'\][\`m'fY[i`UhYX'UbX'hfUbgdUfYbhX][]hU`'UggYhž'U'gYYa]b[`m'ZcfkUfX!h\]b\_]b['acjY'Ua]Xgh'U`UbXgWUdY'f]XX`YX'k]h\'ibWYfhU]bhm'giffcibX]b[WfmdhcWffYbW]Yg"

K ]h\ h\ YgY XYj Y`cda Ybhgžh\ Y`Hfi a d`ZUa ]`mg`Vi g]bYgg ghfUhY[]Yg`XYgYfj Y`WcgY`UhhYbh]cb"`5g`h\ Ym'bUj ][UhY`h\ Y`Wca d`Yl k UhYfg`cZ`WfmdhcW ffYbWm'UbX`]bhYfbUh]cbU``]bj Ygha Ybhgž ei Ygh]cbg`UVci h`WcbZ]Whg`cZ`]bhYfYgh`UbX`Yh\]WU``[cj YfbUbWY`k]`` Wcbh]bi Y`hc`fYgcbUhYž`YgdYW]U``m`Ug`h\ Ym`UfY`dfcdY``YX`]bhc`h\ Y gdch`][\h`cb`U`[`cVU``gWU`Y"'<ck`h\ Y`Hfi a d`ZUa]`m`VU`UbWYg`h\ Y]f`Y[]g`Uh]j Y`dUgh`k]h\`h\ Y]f`Vi g]bYgg`dfYgYbh`fYa U]bg`hc`VY`gYYbž Vi h`cbY`h\]b[`]q`Zcf`WYfhU]b.`h\ Y`Z]bUbW]U``qU[U`]q`ZUf`Zfca `cj Yf"

8 Y hU]`g	
Cfh	8cfU`ž: `cf]XUžI b]hYX GhUhYg
EiY``Yb	<ul><li>hY WX ghc fm"]b</li></ul>
	• UVWbYkg"[c"Wca
	<ul><li>kkk"bYkgkYY_"Wca</li></ul>

6 Ygi W Yb 'G]Y 'i bg 'Ui Z 'a Y]b!k ]Yb "b Yh