



# SOCF5103

F YgYUfVX '€ggi Yg']b'7 ci bgY``]b[ 'GcWU'`K cf\_

HYfa `C.bY`'#`&\$&\$



GWcc`cZGcWU`GWYbWg`#`1 BGK ``5ftg`UbX`GcWU`GWYbWg

7c f g Y G j Y f j ] Y k

'G H U Z ' 7 c b H U W h ' 8 Y H U ] ` g '

' 7 c b j Y b c f g '

B U a Y	9 a U ] `			

7 ci fgY'8YHJ]`g

7 fYX]hDc]bqg '\*`

Gi a a UfmicZ`h\Y'7 ci fgY

H\]g`Wci fgY`]b`h\Y`A UghYf`cZ7 ci bgY``]b[ `GcW]U`K cf\_`fA 7 GK E`dfc[ fUa `]b]fcXi W]g`mci `hc`fYgYUfW`UbX`  
h\Y`fc`Y`cZfYgYUfW`]b`h\Y`XYj Y`cda YbhcZ`\_bck`YX[ Y`UbX`]b`fY`U]cbg\]d`hc`W]b]WU`gcW]U`k cf\_`dfUW]W`"  
Mci `k`][ U]b`Ub`i bXYfg]UbX]b[ `cZei Ub]h]U]j Y`UbX`ei U`]h]j Y`a YhcXc`c[ ]Yg`UbX`Yi d`cfY`h\Y`j U`i Yg`UbX`  
dc`]h]W`W`b]h]i hcZfYgYUfW`UW]j ]mz`]bWi X]b[ `Yj ]XYbW`VUgYX`gcW]U`k cf\_`dfUW]W`"Mci `k`][ Vi ]X`cb`h]g`  
\_bck`YX[ Y`hc`XYj Y`cd`UbX`Udd`mig\_]`g`]b`]bZcfa U]cb`]h]fUW]i]bWi X]b[ ``cW]h]b[ žYj U`i U]b[ `UbX`i g]b[  
fY`Yj Ubh]bZcfa U]cb`Zcf`h\Y`di fdcgY`cZfYgYUfW`"H\Y`]b]h]fUW]j Y`gmiY`cZ]h]UW]b[ `]b`h]g`Wci fgY`UbX`h\Y`  
Wci fgY`UggYgga Ybhd]c[ fUa `k`][`dfcj ]XY`cddcf]i b]h]Yg`Zcf`mci `hc`Z`f]h\Yf`XYj Y`cd`mci f`i bXYfg]UbX]b[ `cZ`

# 5ggYgga Ybh

## 5ggYgga YbhHUg\_g`

5ggYgga YbhHUg_	K Y][ \h	8i Y'8UHŸ	Gh XYbh@YUfb]b[ Ci hWta Yg'5ggYggYX
5gg][ ba Ybh%	( \$i	&\$#\$' #&\$&\$' %&.\$\$.DA	%ž(
5gg][ ba Ybh&	* \$i	&( #\$( #&\$&\$' %&.\$\$.DA	&ž ž(

## 5ggYgga Ybh8YHU]`g

5ggYgga Ybh% '5gg][ ba Ybh%

GHUfhXUHŸ.´

@Yb[ h.´%) \$\$'k cfXg

8YHU]`g. Gh XYbŸg'k ]`gi Va ]hU'fYgYUfWŸ YggUmfa Ul ""%) \$\$'k cfXgŁ'cb'U'Łcd]WfY'Yj UbhŁc' hY'WŁi fgY a UHf]U"Gh XYbŸg'k ]`fYWŸ]j Y'k f]HŸb'ZYXVUW'UbX'U'bi a Yf]WŸ' [ fUXY'k ]h]b' hY'b'k cf\_]b[ 'XUmg'cZgi Va ]gg]cb""H\Y ZYXVUW'g\YYHŸfi Vf]Wk ]`VY'Uj U]UV'Y'Łc' gh XYbŸg'Uih\Y'ghUfhcZ hY'WŁi fgY'gc' h.Uh hYmWŸb'k cf\_Łc'k UfXg'gdYWŸZYX'ghUbxUfXg""´

5XX]h]cbU'XYHU]`g.

5ggYgga Ybh%f%) \$\$'k cfXgŁ]g'k cfh\ ( \$i 'UbX' ]g'Xi Y'Łc' VY'gi Va ]HŸX'j ]U'Ya U]`UHUWŸa YbhVm: f]XUm %&.\$\$.DA 'fK YY\_) Ł""H\]g'Ugg][ ba YbhUggYggYg @YUfb]b[ 'Ci hWta Yg'%ž(

Gh XYbŸg'k ]`gi Va ]hU'fYgYUfWŸ YggUmfa Ul ""%) \$\$'k cfXgŁ'cb'U'Łcd]WfY'Yj UbhŁc' hY'WŁi fgY'a UHf]U"

Gh XYbŸg'k ]`fYWŸ]j Y'k f]HŸb'ZYXVUW'UbX'U'bi a Yf]WŸ' [ fUXY'k ]h]b' hY'b'k cf\_]b[ 'XUmg'cZgi Va ]gg]cb""H\Y ZYXVUW'g\YYHŸfi Vf]Wk ]`VY'Uj U]UV'Y'Łc' gh XYbŸg'Uih\Y'ghUfhcZ hY'WŁi fgY'gc' h.Uh hYmWŸb'k cf\_Łc'k UfXg'gdYWŸZYX'ghUbxUfXg""´

- ⇒Ybh]zmUbX'WŸ]h]ei Y'j Uf]ci g'gmYg'cZfYgYUfWŸ' i gYX'Łc' XYg][ b'UbX' ]a d'Ya YbhU'gh XmicZ WŁi bgY""]b[ #hYfUdYi h]WdfUWŸWŸ
- 5dd'mih\Y'WŁfY'Y'Ya YbŸg'cZU'fYgYUfWŸ' d'fcWŸgg' ]b'cfXYf'Łc' XYg][ b'mci f'ck b'dfUWŸWŸ' ]bZ'fa YX fYgYUfWŸ' fY'Yj UbhŁc' mci f'k cf\_d'UWŸ'gYHŸ]b[ "

Gi Va ]gg]cb' bchYg.Łc' VY'gi Va ]HŸX'j ]U'Ya U]`UHUWŸa Ybh

Hi fb]h]b'gYHŸ]b[ . H\]g' ]g' bchU'Hi fb]h]b' Ugg][ ba Ybh

5ggYgga Ybh& '5gg][ ba Ybh&

GHUfhXUHŸ.´

@Yb[ h.´&) \$\$'k cfXg

8YHU]`g. Gh XYbŸg'k ]`gi Va ]hU'fYgYUfWŸ YggUmfa Ul ""&) \$\$'k cfXgŁ'cb'U'Łcd]WfY'Yj UbhŁc' hY'WŁi fgY

a UHYf]U""Gh XYbHg'k ]"fYVW]j Y'k f]Hb'ZYXVUW\_UbX'U'bi a Yf]WU' [ fUXY'k ]h]b'Hyb'k cf\_]b[ 'XUmg'cZ  
gi Va ]gg]cb""H\Y'ZYXVUW\_g\YYHfi Vf]Wk ]"VY'Uj U]UV'Y'hc'gh XYbHg'UhihY'ghUfhcZhY'Wci fgY'gc'h UhihYm  
WUb'k cf\_'hc'k UfXg'gdYVW]ZYX'ghUbxUfXg""H\]g' ]g'hY'Z]bU'UggYgga YbhZcf'h]g'Wci fgY'Zcf'UHY'bxUbwW  
di fdcgYg

5XX]h]cbU'XYHJ]g.

5gg][ ba Ybh&'f&) \$\$'k cfXgE' ]g'k cfh' \*\$i 'UbX' ]g'hc'VY'gi Va ]HXY'j ]U'Hi fb]hb'UbX'Ya U]'UHUW'a YbhVm  
: f]XUm%&.\$\$'DA 'fK YY\_'%\$E'Vm\$) .\$\$'DA "'H\]g'Ugg][ ba YbhUggYggYg'@YUfb]b[ 'Ci hW'a Yg'&Z ž

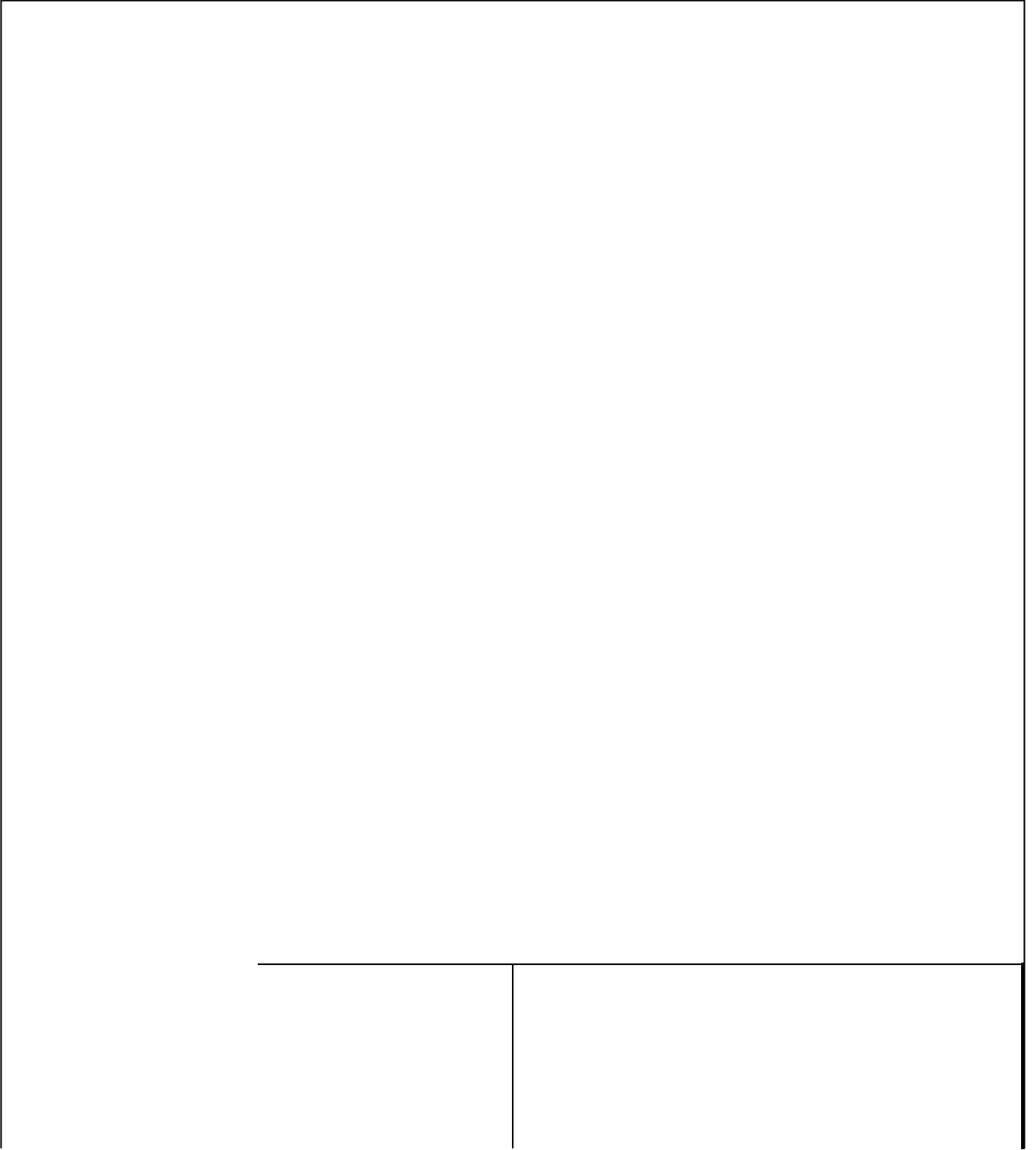
Gh XYbHg'k ]"gi Va ]hU'fYgYUfW'YggUmifa Ul ""&) \$\$'k cfXgE'cb'U'hc'd]WfY'Yj Ubh'hc'hY'Wci fgY'a UHYf]U""

Gh XYbHg'k ]"fYVW]j Y'k f]Hb'ZYXVUW\_UbX'U'bi a Yf]WU' [ fUXY'k ]h]b'Hyb'k cf\_]b[ 'XUmg'cZgi Va ]gg]cb""H\Y  
ZYXVUW\_g\YYHfi Vf]Wk ]"VY'Uj U]UV'Y'hc'gh XYbHg'UhihY'ghUfhcZhY'Wci fgY'gc'h UhihYmWUb'k cf\_  
hc'k UfXg'gdYVW]ZYX'ghUbxUfXg""

H\]g' ]g'hY'Z]bU'UggYgga YbhZcf'h]g'Wci fgY'Zcf'UHY'bxUbwW'di fdcgYg

- 5f]W'UH'HY'hY'fY'U]cbg\ ]dg'VYhk YYb'gcW]U'k cf\_'dfUW]W'UbX'fYgYUfW'UbX'Yj ]XYbW'!VUgYX  
dfUW]W'f96DŁ
- @cWUHY'žYj U'i UHY'UbX'i gY'fY'Yj Ubh]bZcfa U]cb'Zcf'hY'di fdcgY'cZfYgYUfW' ]b'dfUW]W'Wc'bhY'lg'
- 5dd'mihY'WcfY'Y'Ya Ybhg'cZU'fYgYUfW'dfcW'gg']b'cfXYf'hc'XYg][ b'mci f'ck b'dfUW]W' ]bZcfa YX  
fYgYUfW'fY'Yj Ubh'hc'mci f'k cf\_'d'UW'gYH]b[ "

Gi Va ]gg]cb'bcHY'g'hc'VY'gi Va ]HXY'j ]U'Hi fb]hb'UbX'Ya U]'UHUW'a YbhVm: f]XUm%&.\$\$'DA 'fK YY\_'%\$E'Vm



		UbX'X]gWci fgY'UbU'm]g/gcWU'a YX]U'Ug'U'gci fW'cZ i gYZ'`ei U']hUj Y'XUHU''9I Ua d'Yg'cZdfUW]W ]bZcfa YX'fYgYUfW' d'fc'YWg' i g]b[ 'hYgY'a YhcXg
K YY_*.'&'A UfW '!'+ A UfW		K YY_*.'5 a^STadSf[hWbSdf[U]bSfack SbbdaSUZWé fa dWéWSdJZ` SUf[a` dWéWSdJZ S` V WfZ` aYcSbZk  K \UhXc'k Y'a YUb'Vm'DfUW]W' bZcfa YX'F YgYUfW' / Ybgi f]b[ 'dUf]W]dU]cb'cZdfUW]h]cbYfg'UbX'gYfj ]W i gYfg']g'[ Ybi ]bY/YI Ua d'Yg'cZdfUW]W' ]bZcfa YX fYgYUfW' d'fc'YWg
K YY_+. '\$'A UfW '!" 5df]		K YY_+. 'C gS` f]fSf[hW? WfZaVa`aYk` Zai _ S` kl Zai` aXW' Zai _ gUZ S` V g` VWdi ZSf U[d]g_ eFS` UWé  H\Y'Z'Ug]V]]hmcZhY'YI dYf]a YbH'`a YhcX' ]b dfUW]W' gYh]b[ g/9I dYf]a YbH' /ei Ug]! YI dYf]a YbH' UbX'bcbyI dYf]a YbH'`XYg][ b/F 7 Hg ]b' dfUW]W WébhYI hg/hY'ei Ub]h]h] Y'fYgYUfW' d'fc'Wgg  ,
K YY_.'* '5df]'! '%\$ '5df]		K YY_.'* ? ]j W ? WfZaVe S` V A gfUa_ Wé D WéWSdJZ i ZSf VaWé fZ[e fW^ge STagf bcdSuf[UM  I bXYfghUbX]b[ 'ci hWéa Yg' ]b' dfUW]W' /a cb]rcf]b[ UbX'UXa ]b]ghU]cb'XUHU`-i gYg'UbX' ]a ]h]cbg/ YI Ua d'Yg'cZa ]I YX'a YhcXg'fYgYUfW
K YY_-'.'% '5df]'! '%+ 5df]		K YY_-'.'7 hS'gSf]a` XadEaU]S^I` ad] BcdSuf[UW Zai Va i W]` ai S` [ fWchW f]a` [e WXXAUf]hW  <ck`Xc'k Y'UggYgg'k cf_Yf'UbX'W]Yb]g'dYfWdh]cbg cZ'k \Uhk cf_g'ž'Zcf'k \ca`'UbX'`i bXYf'k \Uh W]fW a g]UbW]g'3'9I Ua d'Yg'cZY] U'i U]cb'g]i X]Yg
K YY_%. '&\$'5df]'! '&( 5df]		K YY_%. '? Ws` [ YXg^=` ai` WYW7j UZS` YW  <ck`Xc'k Y'a U_Y'gi fY'fYgYUfW' ]g'a YUb]b[ Z`m hfUbg'UhYX' ]b]c'gcW]U`k cf_`dfUW]W' Wéi bgY'' ]b[ WébhYI hg/7 cbZ'fYbW' d'fYgYb]h]cbgž 7 YUf]b[ \ci gYgž'fYd]c]rcf]Yg'UbX'fYgYUfW' \i Vg

# F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

H\Y`fYWca a YbXYX`hI hZcf`h]g`Wci fgY`]g`A Ufh]b`K`YVVYf` 5dd`m]b[ `F YgYUfW`9j`]XYbW`]b`GcW]U`  
K`cf`\_`DfUW]W` `f&\$%`&`di V`]g\YX`VmDU`[`fUj`Y`A`UW` `]`Ub"

7\UdhYfg`Zca`h]g`hI`hk`]`VY`]g`hYX`Ug`Wca`di`gc`fm`fYUX]b[ `Vi`hk`]`U`gc`VY`gi`dd`Ya`Yb`hYX`Vmch`hYf`  
fYgci`fWg`i`d`c`UXYX`]b`A`cc`X`Y"

H\Y`I`BGK` `6cc`\_g\cd`\Ug`c`fXYfYX`]b`hY`hI`hZcf`di`fW`UgY"

# F YWca a YbXYX`F Ygci fWg

5XX]h]cbU`fYUX]b[ g

Gh`XYb]g`g\ci`X`bchZY`]]a`]hY`h`hY`hI`hUbX`hY`]]hYfUhi`fY`dfcj`]XYX`]b`A`cc`X`Y`j`]U`@Y[`Ub]fc"

H\YfY`UfY`bi`a`Yfci`g`UXX]h]cbU`fYUX]b[ g`Uj`U]UV`Y`Zcf`i`gY`]b`GC`7`:`) `%\$` `UggYgga`Yb`h]Ug\_g`]b`hY`I`BGK`  
]VfUfm]g`ci`fbU`Wc`Y`W]cb"

E`fg`VW`fe`eZag`V`TWS\_` [fSdi` [fZ`fZ`WG`@E`I` >[T`d`S`d`k`I` WTe[fW` [\hfd.##k k k`"\]VfUfm\]i`bgk`"YXi`"Ui`z`](#)

Zmci` \Uj`Y`bchi`gYX`h]g`dfYj`]ci`g`m`z`mci`k`]`VY`bY`Z]hZca`VYWca`]b[ `ZJa`]Uf`k`]h`:`cc[ `Y`G`W`c`Uf`  
[f\hfd.##gWc`Uf`\[cc\[ `Y`Wca`\\_`E`Ug`U`\\_`Y`mg`Y`Uf`W`Y`b\[`\]bY`Zcf`U`W`X`Y`a`\]W`di`V`\]W`h\]cbg`UbX`fY`dc`f`g`"\]Mci`W`W`b`g`Y`h`  
i`d`hY`d`fY`Z`fY`b`W`g`h`"\]b`\\_`h`hY`I`BGK` `@\]VfUfm\]Y`Y`b`k`Y`b`mci`UfY`b`ch`cb`W`Ja`di`g"](#)

;`c`h`:`cc[ `Y`G`W`c`Uf`2`g`Y`h]b[ g2`]VfUfm]b\_gz`UbX`Y`b`hY`f`"I`b]`Y`fg]h`mc`Z`B`Y`k`Gci`h`K`U`Y`g`]b`hY`V`ci`Zcf`  
"@]VfUfm]"

Mci`W`W`b`g][`bi`d`Zcf`HUV`Y`c`Z`7`cb`hY`b]g`f`HC`7`E`5`Y`f`g`Zca`hY`\ca`YdU[`Yg`c`Z`fY`Yj`Ub`h`ci`fbU`g`z`h`c`fY`W`]]`Y`  
Ub`Ya`U]`k`\Y`b`Yj`Yf`b`Yk`Uf]h]WYg`UfY`di`V`]g\YX`]b`h`U`h`ci`fbU`"]>ci`fbU`k`YVg]hY`g`k`]`c`Z`h`b`W`l`f`f`m`  
]b`Z`c`fa`U`h]cb`cb`hY`a`c`ghj`]Yk`YX`UbX`a`c`gh]hYX`Uf]h]WYg/hY`g`Y`UfY`"]\_Y`m`h`c`VY`]b`hY`f`g`h]b[ `UbX`c`Z`h`b`  
]b`Zi`Y`b`h]U`W`c`b`h]Vi`h]cbg";`cc[ `Y`G`W`c`Uf`k`]`U`gc`dc]b`h`mci`h`c`Uf]h]WYg`h`U`h`\Uj`Y`W]hYX`U`d`Uf]h]W`Uf`Uf]h]WY`  
UbX`\Y`b`W`k`]`VY`fY`U`hYX`h`hY`h`c`d]W

5`cb[ g]XY`hY`hI`h`hY`fY`UfY`c`hY`f`j`U`i`UV`Y`fY`gci`fW`g`Zcf`GC`7`:`) `%\$` `UggYgga`Yb`h]Ug\_g.



HYUW]b[ '9j U'i Uhcb'UbX' a dfcj Ya Ybhf7 5H9 4'dfcW'gg" bZcfa U' ZYXVUW' UbX'WUgg! [ YbYfUHx  
ZYXVUW' UfY'U'gc 'ja dcfhUbh'hc'cb! [ c]b[ 'W'ci fgY'XYj Y'cda YbH'Gh XYbhZYXVUW' ]g' hU'Yb'gYf]ci g'miUbX  
gi VghUbh]U''ja dfcj Ya YbHg'UfY'a UXY'hc'U''W'ci fgYgZ]bW' X]b[ 'GC 7: ) %\$' 'VUgYX' ]b'dUf'icb'gi W' ZYXVUW'"

G][ b]Z]W]bhW]Ub[ Yg'hc'hY'W'ci fgY'k ]''VY'W'ca a i b]W]h'X'hc'gi VgYei YbhW'c'f'g'c'Z'gh XYbh'g'hU\_]b[ 'hY  
W'ci fgY'' : cf'YI Ua d'Yz'U'V'Yb'XYX'Y'Ufb]b[ 'UW]j ]]m'UbX'hY' ]bW' g]cb'c'Z'Ub' ]bW'Y'UgYX'bi a VYf'c'ZdfUW]W  
]bZcfa YX'fYgYUfW'dfc'Y'W'g' ]b'fYgdcbgY'hc'gh XYbhZYXVUW'dfcj ]XYX'Vm'hY''Ughf&\$\$% E'GcW]U'K cf\_  
7 ci bgY'' ]b[ 'gh XYbhW'c'fh'

a U[ Y'7 fYX]h

H\Y'ja U[ Yg'cb'h.]g'g]h'c'ZYfYX'i bXYf'U'7 fYU]j Y'7 ca a cbg'' ]W'bgY

7F 7CG

7F 7CG'Dfcj ]XYf'7 cXY.'\$\$\$- , ;

Dck YfYX'Vm

Gi Va ]gg]cb`cZ5ggYgga YbhHUg\_g

Gi Va ]gg]cb`cZ5ggYgga YbhHUg\_g

Hi fb]hb`Gi Va ]gg]cb

zmc i`YbWci bhYf`U`dfcV`Ya`k` \Yb`U`H`Ya` dh]b[ `hc`gi Va ]hmc i`f`Ugg][ ba YbhHfci [ \`Hi fb]hbzd`YUgY  
H`Yd\cbY`9I`H`fbU`Gi` ddcfhcb`-` , )`" ` ' ` %cf`Ya U]`H`Ya` `cb`YI`H`fbU`H`hgi` ddcfh4` i` bgk`"YXi`"Ui`" `Gi` ddcfh  
\ci`fg`UfY` , .`\$\$Ua` -`-%\$.`\$\$da` `cb`k`YY`XUmg`UbX`-` .`\$Ua` -` )` .`\$da` `cb`k`YY`YbXg`fI`\*)` `XUmg`U`mY`UfL`" zmc i  
UfY`i` bUV`Y`hc`gi Va ]hmc i`f`Ugg][ ba YbhXi`Y`hc`U`ZU`i`hik`]H`Hi`fb]hb`mci` `a`UmUdd`miZc`f`Ub`YI`H`bg]cbz`Vi`hmc i  
a`i`ghfY`H]b`mci`f`h]W`Yhbi`a`VYf`Zca` `9I`H`fbU`Gi` ddcfhfU`cb[ `k`]H`Ubmc`H`Yf`fY`Yj`UbhXcW`a`Ybhg`L`hc  
]bW`i`XY`Ug`Yj`]XYbW`hc`gi` ddcfhmc i`f`YI`H`bg]cb`Udd`]W]h]cb" zmc i`Ya`U]`9I`H`fbU`Gi` ddcfhmc i`k`]`  
Ui`hca`U]W]m`fYW]j`Y`U`h]W`Yhbi`a`VYf`z`Vi`h]Zmc i`H`Yd\cbY`mci`k`]`b`Y`Y`X`hc`gd`Y`W]W]m`Ug`\_`Zc`f`cbY`"  
Hi`fb]hb`U`gc`d`fcj`]XYg`i`d`XU`H`g`icb`H`Y]f`gm`gh`Ya` `gh`U`h`g`icb`Hk`]H`Yf`"

; YbYfU`mz`UggYgga YbhHUg\_g`a`i`ghVY`gi Va ]H`Y`X`Y`Y`W`f`cb]W]m`j`]U`Y]H`Yf`Hi`fb]hb`cf`U`A`ccX`Y`  
Ugg][ ba Ybh`H`b`]bg`H`Ub`W`g`k` \YfY`H`L`g`]g`b`chid`cgg]V`Y`Z`]h`k`]`V`Y`g`H`Y`X`icb`mci`f`Wci`fgY`g`A`ccX`Y`g`]H`k`]H`  
U`H`fb`U`h]`Y`gi Va ]gg]cb`XY`H]`g"

: cf`]bZc`fa`U]cb`cb`\ck`hc`gi Va ]hUgg][ ba Ybhg`cb`]bY`j`]U`A`ccX`Y`.\`H`tdg`#`gh`XYbh`i`bgk`"YXi`"Ui`#`ack`!  
gi Va ]hUgg][ ba Ybh`a`ccX`Y`

5 WUXYa ]W<cbYghmiUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga `]g`i`g]b[ `h`Y`k`cfXg`cf`]XYUg`cZc`h`Yfg`UbX`dfYgYb]b[ `h`Ya`Ug`mci`f`ck`b" `#WUb`hU`Y`a`Ubm  
Zcfa`gž`Zca`XY`]VYfU`h`W`Y`U`h]b[ `h`U`W`Y`X`Y`b`U`m`W`d`m]b[ `Zca`U`gci`f`W`k`]h`ci`h`U`W`b`ck`Y`X[ `Ya`Y`b`h`



5 WUXYa ]WbZcfa Uhcb`

: cfYggYbhU`ghi XYbh]bZcfa Uhcb`fY`Uh]b[ `rc.

- fYei Ygh`ZcfYI hYbg]cb/
-