

EDST5122

Gh XYbh@YUfb]b[']'b'<][\Yf'9Xi WWh]cb

GYa YghYf'Hk c''##'&\$%

GWXcc``cZ9XI WWh]cb ``##'I BGK ``5fhg'UbX'GcWJU``GWhYbWg

7 ci fgY`Cj Yfj JYk

'GHUZZ7cbhUWhi8YHU]`g`

'7cbj Ybcfg`

B Ua Y	9a U]`	5j U]UV]J]m	@cWUhcjb	D\cbY
Gi Y`GHUfZ]Y`X	g"ghUfZ]Y`X4 i bgk "YXi "Ui	D`YUgY`WcbhUWhia Y VmYa U]"	%%\$'; ccXgY``	f\$&E'- ' ,) &) &(

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GWXcc``cZ9Xi WUhcjb

5fng`UbX`GcW]U`GWYbWYg

@Yj Y`%ž>c\b'; ccXgY``@i]X]b[`fI &\$E

H. ž*%f&E'- ' ,)`% ++

9. YXi WUhcjb4 i bgk "YXi "Ui

K . YXi WUhcjb"Ufng"i bgk "YXi "Ui

5hYbXUbW`F Yei]fYa Ybhg

5XX]h]cbU`GWXcc``cZ9Xi WUhcjb`UhYbXUbW`fYei]fYa Ybhg

h]g`YI dYWYX`h.UhUbmigh XYbhYbfc`YX`]b`Ub`98GH`Wci fgY`k]h`h`Y`GWXcc``cZ9Xi WUhcjb`k]`a U_Y`U Wca a]fa Ybhtc`h`Y]f`YUfb]b[`UbX`UhYbX`U`WUggYg`]b`Z`k`YfY`WcbhYbh]g`XY`]j YfYX`]b`U`ZUW!hc!ZUW a cXY`YI W`dh]b`W`fU]b`W]fW a ghUbwW`g`k`YfY`UVgYbW`]g`Xi`Y`hc`]`bYggž`a]gUXj Ybh fy`cf`i bZcfYgYYb W]fW a ghUbwW`g`VYmcB`h`Y`gh XYbhg`Wcbhfc`"5`a]b]a i a`UhYbXUbW`fYei]fYa Ybhcz, \$i`]g`fYei]fYX`Zcf YUW`Wci fgY`" `b`W`fU]b`W]fW a ghUbwW`g`z`U`gh XYbhia Umia]gg`i d`hc`&\$i`cZU`Wci fgY`k]h`ci hZcfa U`Udd`]WUhcjb`UbX`i d`hc`" i`cZU`Wci fgY`k]h`Zcfa U`XcW a YbhUhcjb`fgYbhj]U`Ya U]`hc`Wci fgY`Wcbj YbcfE dfcj]X]b[`U`h`Y`fYei]fYa Ybhg`XYHU]YX`VY`ck`UfY`a`Yh`Gh XYbhg`bcha YYh]b[`h`Y`UhYbXUbW`fYei]fYa Ybhg`ci h]bYX`UVcj`Y`k]`VY`Uk UfYX`Ub`i`bgUhgZUW`c`fm: U]`fI : E`Zcf`h`U`h`Wci fgY`fY[UfX`Ygg`cZ`h`Y]f`dYfZcfa UbW`]b`h`Y`UggYgga YbhUg`g`cf`ch`Yf`fYei]fYa Ybhg`Zcf`h`Y`Wci fgY`"

: cf`Z`f`h`Yf`]bZcfa Uh]cb`cb`9Xi WUhcjb`Wci fgY`UhYbXUbW`fYei]fYa Ybhg`z`d`YUgY`fYZf`hc`h`Y`fYgdYW]j`Y`98GH`A`ccX`Y`a`cXi`Yf]g`E"

5WUXYa]W`bZcfa Uh]cb`

: cf`YggYbh]U`gh XYbh]bZcfa Uh]cb`fY`Uh]b[`hc`fYei Yghg`Zcf`YI hYbg]cb/fYj]Yk`cZa Uf_g/cWV dUh]cbU`Y`YU`h`UbX`gUZYhm`YI Ua]bUh]cb`dfcW`Xi`fYg/gdYW]U`Wcbg]XYfUh]cb`]b`h`Y`Yj Ybhcz]`bYgg`cf`a]gUXj Ybh fy`/gh XYbhYei]hmUbX`X]gUV]`]hm`UbX`ch`Yf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbž`gYY`[\hfdg.#k k k "Ufng"i bgk "YXi "Ui #W ffYbh\]gh XYbhg#UWUXYa \]W\]bZcfa Uh\]cb#dfchWc`gl\[i \]XY`\]bYg#](#)

7 ci fgY'8YHJ]`g

7 fYX]hDc]bHg`*`

K cf_`cUX

%) \$\`ci fg]bWi X]b[`WUgg`WcbHUi\ci fgžfYUX]b[gžWUgg'dfYdUfU]cbžUggYgga YbžZc``ck`i d`UW]j]hYgž YHw

Gi a a UfmcZ`h`Y`7 ci fgY

⊕`h`jg`Wci fgYžmci `k`j`Vi]X`cb`h`Y`Vf]YZ]bfcXi W]cbg`hc`gh`XYbh`YUfb]b[`UbX`YZZYW]j`Y`h`YUW]b[dfYgYbhX`]b`h`Y`⊕fcXi W]cb`hc`I`b]j`Yfg]mi@YUfb]b[`UbX`HYUW]b[`Wci fgY`H`jg`Wci fgY`]g`VUgYX`cb`h`Y Uggi`a`dh]cb`h`Uh]b`cfXYf`hc`]a`dfcj`Y`gh`XYbh`YUfb]b[žh`YUW]b[`dfUW]W`bYYXg`hc`VY`i`bXYfd]bbYX`VmUb i`bXYfghUbX]b[`cZ`ck`dYcd`Y`YUfb`Mci`k`j`Wcbg]XYf`YUfb]b[`Zca`U`bi`a`VYf`cZdYfgdYW]j`Yg`h`Uh]bWi`XY`h`Y`YI`dYf]YbW]g`cZgY`Z`Wc`YU[i`Yg`UbX`gh`XYbh]UbX`h`Y`X]j`YfgY`YXi`W]h]cbU``]h`fUhi`fY`h`UhXfUk`g`Zca`Z]Y`Xg`gi`W`Ug`UXi`h`YUfb]b[ž`][\Yf`YXi`W]h]cbž`fYgYUfW]`]bhc`X]gW]d`]bUfm`YUfb]b[`UbX`h`YUW]b[`UbX`fYZYW]j`Y`dfUW]W``Mci`k`j`VY`Ug`_YX`hc`YI`d`cfY`h`Y`bUhi`fY`cZ[ccX`h`YUW]b[`]b`][\Yf`YXi`W]h]cb`UbX`UddfcUW]Yg`hc`h`YUW]b[`h`Uh`YUX`hc`][\`ei`U`]mi`YUfb]b["

5 h`h`Y`WcbWi`g]cb`cZ`h`jg`Wci fgY`h`Y`gh`XYbhk`j``VY`UV`Y`hc

%"

H\Y`hYUWX]b[`ghfUhY[]Yg`Zc`f`h\]g`Vti fgY`UfY.`

%`""`hc`Vi`]X`cb`YUfb]b[`h\Ycf]Yg`UbX`UddfcUWX`Yg`hc`hYUWX]b[`]bfcXi`W`X`]b`98GH) %&%`f7`@C`'%z`&z`' `UbX`
(`L`f5ggYgga`Ybhtg`%z`&`UbX`" `L`f5ggYgga`Ybh`" `L`

&""`hc`a`cXY`YZZ`Wj`Y`YUfb]b[`W`b`f`Y`X`UbX`V`Y`b`X`Y`X`Y`Ufb]b[`UddfcUWX`Yg`]b`\[`Y`f`Y`X`i`W`h`c`b`]b`h`Y`
hYUWX]b[`UbX`UggYgga`Ybhd`f`U`W`j`W`g`c`b`h\]g`Vti fgY`f7`@C`'%z`&z`' `UbX`(`L`f5ggYgga`Ybhtg`%z`&`UbX`" `L`

' ""`hc`i`gY`h`Y`X`j`YfgY`Yi`dYf]YbW`c`Z`Vti fgY`d`U`f`h`j`W`d`U`b`h`g`U`g`k`Y`" `U`g`c`h`Y`f`U`W`X`Y`a`]W`g`h`c`X`Y`j`Y`c`d`

5ggYgga Ybh

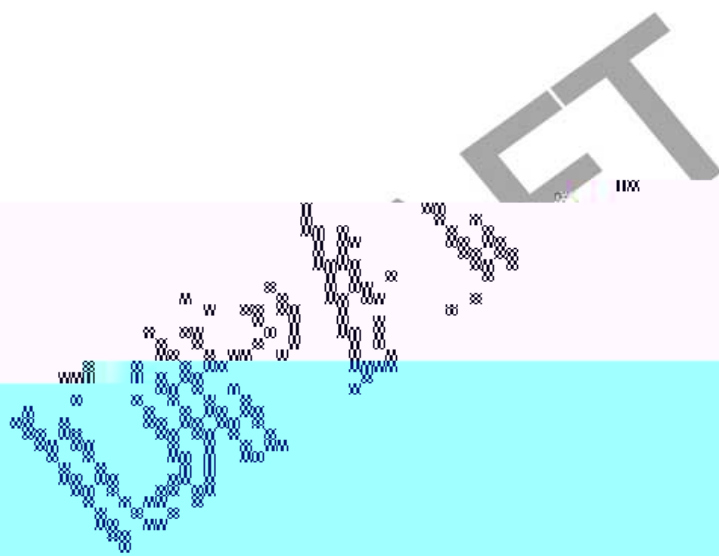
Q-YfY'mci 'WUbc'ci h]bY'UbmiFY'Yj Ubh]bZcfa Uh]cb'hUhk Ug'bch]bWl XYX'j]b'5 A G'Vi ha Umidfcj Y'\Y'dZ'`Zcf
mci f'gh XYbhg": cfYl Ua d'Yžmci 'a][\hdfej]XY'XYUJ]g'cb'hY'fYZfYbW]b['gmghYa ž"b_g'hc'dfYj]ci g
gh XYbhYl Ya d'Ufg'cf'hY'XYg][bUHX'k YY_]b'hY'Wci fgY'hUhmci 'k]'X]gW gg'hY'UggYgga YbhUh'Yb[h"
a dcfhUbhmž'h]g'gYW]cb:]g'Ub'UfYU'Zcf'mci 'hc'dfej]XY'j]bZcfa Uh]cb'hUhXcYg'bch[c'h'fci [\ 'hY'Uddfcej YX
[cj YfbUbW'ghfi W'h fY"Q

5ggYgga YbhHUg_g'

5ggYgga YbhHUg_	K Y][\h	Gh XYbh@YUfb]b[Ci hWca Yg		

5XX]h]cbU`XYHJ]`g.

H\Y`gYWŁbX`UggYgga YbhUg_]g`hc`k`f]H`Ub`YggUmcb`gh`XYbh`YUfb]b[`UbX`\ck`i]hfY`UHg`hc`mci`f`
UddfcUW`hc`h`UW]b[`ž`XfUk`]b[`Zca`mci`f`YI`dYf]YbWgž]bg][`hg`Zca`mci`f`W`YU[`i`Yg`YI`dYf]YbWgž`h`Y`
h`YcfYh]W]`]h`fUhi`fY`UbX`Zca`fYgYUfW`]b`hc`mci`f`ck`b`ghi`XYbhg`YI`dYf]YbWg`cZ`YUfb]b[`i]b`cbY`cZmci`f`
W`i`fgYg`"H\Y`U]a`cZ`h`Y`hUg_]g`hc`i`gY`h`YgY`]bg][`hg`hc`Z`fh`Yf`XYj`Y`cd`UbX`Ufh]W`UH`mci`f`ck`b`h`UW]b[`
d\]cgcd\mfU`gc`fYZffYX`hc`Ug`U`fU]h]cbU`Yž`UddfcUW`cf`ZUa`Yk`cf`Ł"



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Yei U`k Y][\h]b`XYHfa]b]b[`hY`fYWta a YbXYX`[fUXY"8YdYbX]b[`cb`hY`bUhi fY`cZhY`UggYgga YbhUg_ž
`YWñi fYfg`a UmU`gc`WcbhYI hi U`]nY`UbX#cf`Ua YbX`hYgY`gdYW[Z]WWf]hYf]U" `H\Y`fYWta a YbXYX`[fUXY`]g
hYbhUj] Y`cb`mžgi Va`YWhc`ghUbXUfX]gUh]cb`dfcWYggYg`UbX`Uddfcj U`Vmh\Y`GW.cc`cZ9Xi WU]cb
@YUfb]b[`UbX`HYUW]b[`7ca a]hY"

I BGK 'G7 < CC @ 'C: '98I 75H€B 'FI 6F ⇨ # 998657? 'G < 99H'

98GH) %&&

5ggYgga YbhHUg_ '5ggYgga Ybh&'fl -B5@Ł

GdYWZJW7 f]hYfJU	''flŁ ————— 2fŁŁ				
I bXYfghUbX'cZħY'ei Ygh]cb'cf']ggi Y'UbX'hY'_'YmWŁbWdthg]bj'c'j YX					
8Ydħ'cZUbUm]g'UbX#f'Wf]hei Y'j]b'fYgdcbgY'hc'hY'hUg_					
: Ua]'Uf]m]k]ħ'UbX'fY'Yj bW'cZdfcZYgg]cbU'UbX#f'fYgYUfWx ']hYfUħi fY'i gYX'hc'gi ddcfhfYgdcbgY					
Għfi Wħi fY'UbX'cf[Ub]nUħ]cb'cZfYgdcbg					
DfYgYbhUħ]cb'cZfYgdcbgY'UWŁ'fX]b['hc'Uddfcdf]Uħ'UWUXYa]WUbX ']b[i]gh]WŁbj Ybh]cbg					
; YbYfU'WŁa a Ybh]fYWŁa a YbXUħ]cbg'Zcf'bYI h]ħa Y.'					

@YWħi fYf

F YWŁa a YbXYX.' ' ' #&\$'fl @DG'7F'8B'<8Ł'

k Y][\ħ]b[' . '&\$i

'B6. ħ.]g'ħ]W_g]'b'ħY'j'Uf]ci'g'Vcl'Yg'UbX'XYg][bYX'hc'dfcj]XY'ZYXVUW'hc'gh'XYbthg/ħ.YmiUFY'bch[]'Yb
Yei'U'k'Y][\ħ]b'XYħ'fa]b]b['ħY'fYWŁa a YbXYX' [fUXY"8YdYbX]b['cb'ħY'bUħi fY'cZħY'UggYgga YbhHUg_ž

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gh XYbng`UfY`YI dYW`X`hc`di h`h`Y]f`bUa Yg`UbX`gh XYbhbi a VYfg`cb`Yj YfmdU[Y`cZ`h`Y]f`Ugg][ba Ybng"

Hi fb]h]b`Gi Va]gg]cb

- K cf_`gi Va]hYX`%\$`hc`%-`XUmg`UZhYf`h\Y`gh]di``UhYX`XYUX`]bY

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

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V']hYg'Ug'U'gh XYbhUhl BGK

		<p>⊖!WUgg'gYgg]cb. %&" \$! '&" \$da ž: f]XUm' %gh 5i [i gh''</p>
K YY_+. ' 'GYdhYa VYf! '- GYdhYa VYf	C b]bY'5Wj] jlm	<p>K YY_+. 'Gh XYbhg'Ug'dUfbYfg Gh XYbhg'Ug'dUfbYfgž Ug'fYgYUfWYfgžUbX'Ug'Wc! WfYUhc fg''</p>
K YY_'. : %\$ GYdhYa VYf! %* 'GYdhYa VYf	GYa]bUf	<p>K YY_'. : Gh XYbhg'Ug'dUfbYfg Gh XYbhg'Ug'dUfbYfgž Ug'fYgYUfWYfgžUbX'Ug'Wc! WfYUhc fg ⊖!WUgg'gYgg]cb. %&" \$! '&" \$da ž: f]XUm%(h GYdhYa VYf</p>
K YY_-. : %+ 'GYdhYa VYf! &' 'GYdhYa VYf	C b]bY'5Wj] jlm	<p>K YY_-. : 'Gh XYbhUddfcUWYg'hc''YUfb]b[Gh XYbhWc bW'dh]cbg'cZ'UbX'UddfcUWYg'hcž 'YUfb]b[''</p>
6fYU_ '&' 'GYdhYa VYf! ' \$'GYdhYa VYf		
K YY_%\$. : %C WcVYf!' + C WcVYf	C b]bY'5Wj] jlm	<p>K YY_%\$. : 9i dYf]Ybh]U''YUfb]b[9i dYf]Ybh]U''YUfb]b[. @]b_]b['hYcfmhc'dfUW]W k]h' h'Y'YI Ua d'Y'cZK @'''' ..</p>
K YY_%%'. : 'C WcVYf!' % C WcVYf	GYa]bUf	<p>K YY_%%'. : 9i dYf]Ybh]U''YUfb]b[⊖!WUgg'gYgg]cb. %&" \$! '&" \$da ž: f]XUm %&h' C WcVYf''</p>
K YY_%&. : %) 'C WcVYf! &%C WcVYf	GYa]bUf	<p>K YY_%&. : @YUfb]b['UbX'hYUW]b[]b'U'WU b[]b[< 9'Wc b hYI h 9i d'c'f]b['Ya Yf[]b[]ggi Yg'Ua]X'h'Y'WU b[]b[< 9'Wc b hYI h' ⊖!WUgg'gYgg]cb. %&" \$! '&" \$ž: f]XUm%- h' C WcVYf</p>

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

F YWca a YbXYX`F Ygci fWg

F YWca a YbXYX`HYI hg

6][[gž>"/`HUB[ž7`"f&\$\$+L"FW\$SUZ[`Y XadcgS`fk`MSd [`Y Sfg` [hWde[fk`"H\]fX`9X]hcb"A U]XYb\YUX. `C dYb
I`b]j Yfg]miDfYgg"
<i bhž@`/`7\U`a Yfgž8`"f9XgŁ`f&\$\$&&L`G` [hWde[fk`fWSUZ[`Y [`XUgež3`MSd [`YŽUW fdW SbbdaSUZž
7Ua VYfk Y`"579F`DfYgg"

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

=k]`VY`hUW\]b[`hY`Wci fgY`Zc`f`hY`Z]fgh]a Y`h\]g`gYa YghYf" =`cc_`Zc`fk UfX`hc`mci f`ZYXVUW`h\fc i [\ `hY
gYa YghYf`UbX`Uh`hY`YbX`cZ`hY`Wci fgY"

⇒ U[Y`7 fYX]h

Gi Y`GHUfZ]Y`X

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7 cXY. \$\$\$- ;