

EDST5129

HfUbg]h]cbg`]b`h\Y`@]j Yg`cZGh XYbhg`k]h`8]gUV]`]h]Yg

HfUfa`&Z&\$&&



7ci fgY`Cj Yfj]Yk

GHJZ`7cbHJW`8YHJ`g

7cbj Ybcfg

Bua Y	9a Uj`	5j Uj`UVj`]m	@cWJhcb	D\cbY
8fF cg\[b] 7\UbXfcc	n' &*, -, ' 4 UX"i bgk "YXi "Ui			

GWcc`7cbHJW`bZcfa Uhjcb

GWcc`cZ9Xi WJhcb

5ftgž8Yg][b`UbX`5fWx]hYW`fY

; fci bX: `ccfžA cfj Yb`6fck b`6i]X]b[`fi &\$Ł

H. ž`*%f&Ł`- ' ,) `%- ++

9. YXi WJhcb4 i bgk "YXi "Ui

K . \hgdg.## k k "Uftg"i bgk "YXi "Ui #YXi WJhcb

5W_bck`YX[Ya YbhcZ7ci blfm

I B G K `5fngž8Yg][b`UbX`5fWk]fYWhi fY? Ybg]b[hcb`UbX`DUXX]b[hcb`Wla di gYg`UfY`Vi]hcb`5Vcf][]bU`
@UbXg"K Y`dUmci f`fYgdYWhg`hc`hY`6]X}[U`UbX` ; UX][U`dYcd`Yg`k`c`UfY`hY`7i`gfcX]Ubg`cZ`hY`gY`UbXg"
K Y`UW_bck`YX[Y`hY`5Vcf][]bU`UbX`Hc`fYg`G`fU]h`g`UbXYf`dYcd`Ygž`hY` :]fgh5i`gfcU`Ubgžk`c`gY`UbXgž
k]bXg`UbX`k`U`fYg`k`Y`U`bck`g`UfYž`UbX`dUm`fYgdYWhi`hc`hY`f`i`b]ei`Y`j`U`i`Ygž`UbX`hY`f`V`b`h]bi]b[`UbX
YbXi`f]b[`W`h`fYg`k`\\W`XYYdYb`UbX`Yb`f]W`hY`Z`cZci`f`b`U`h`cb`UbX`W`a`a`i`b]h`Yg`"

U[Y`W`ci`f`h`g`m`c`Z`h`Y`C`Z]W`c`Z`h`Y`D`f`c`J`]W`!`7`Ub`W`c`f`b`X][Ybci`g`[L`B`G`K`f`g`b`X\]\[Ybci`g`g`f`U`h`\[`m](#)

	UddfcUWX'Yg'hc'Yb[U[Y'UbX'gi ddcfhU''gh XYbhg"	
) "%"	8Yj Y'cd'UbX'Udd'miU'Wca dFY\Ybg]] Y'fUb[Y'cZUggYgga Ybh ghfUHY[]Yg'hc'X]U[bcgY''YUfb]b['bYYXgžWca d'mk]h W ff]W 'i a 'fYei]fYa Ybhg'UbX'gi ddcfhWc''YU[i Yg'hc'Yj U'i UH h.Y'YZZW]] YbYgg'cZh.Y]f'UddfcUWX'Yg'hc'UggYgga Ybh'	&

HYUWX]b['GhfUHY[]Yg'

F YgYUfWX'gi []Ygh'U'Ugh'XYbhg'k]h'X]gUV]]hYg'\Uj Y'X]Z]W 'mk]h'fUbg]hcb]b['h'fci [\ 'X]ZYfYbh']ZY
d\UgYgž'gi W'Ug'Zca 'df]a UfmigW'cc'hc '\]] \ 'gW'cc'ž'UbX'Zca '\]] \ 'gW'cc'hc'fYf]UfmYXi W]hcb'cf
j cW]hcbU''gYh]b[g''Hc'dfYdUFY'gh XYbhg'hc'a U_Y'h.YgY'fUbg]hcbg'gi W'W'ggZ 'nž'h.YUWX'Yfg'W]b']bW'f'cfUHY
fUbg]hcb'g_]g']bhc'h.Y]f'W'ff]W 'U''H\]g'Wci fgY'U]a g'hc'dfc]]XY'bch'ghUbc'j Yfj]Yk 'cZ]Z]W 'h'fUbg]hcbg
Z]W'X'Vmigh'XYbhg'k]h'X]gUV]]hYgž'Vi h'U'gc'ghfUHY[]Yg'h'U'h'UWX'Yfg'W]b'Ya d'cm'hc']bW'f'UgY'h.Y'gi W'W'gg
cZgh XYbhg'Xi f]b['W]h'W'']ZY'gdUb'fUbg]hcbg" H\Y'Zc'ck]b['h'UWX]b['ghfUHY[]Yg'k]''VY'Ya d'cm'X.'

YI d'W]h'UWX]b['']bW]X]b['cb']bY''YW] fYg'i g]b['U'fub[Y'cZ]h'UWX]b['ghfUHY[]Yg'hc'Z'gh'f']b'fYgh
UbX'gi ddcfh'YUfb]b[/

5ggYgga Ybh

5ggYgga YbhUg_	K Y][\h	8i Y'8UHŸ	7ci fgY'@YUfb]b[Ci hŸa Yg'5ggYggYX
%" '9ggUm	()	&- # \$+ #&\$&&\$) . \$\$ 'DA	%ž&ž' ž(
&" ɁX]j]Xi U' HfUbg]hcb'D`Ub)	%&# \$, #&\$&&\$) . \$\$ 'DA	%ž&ž' ž(

5ggYgga Ybh% '9ggUm

8i Y'XUHŸ. '&- # \$+ #&\$&&\$) . \$\$ 'DA

HUg_ %! '9ggUm! '&) \$\$ 'k cfXg

Gh XYbŸg'k]'fYVW]j Y'k f]hŸb'ZYXVUW_k]h]b'%\$'k cf_]b['XUm'cZgi Va]gg]cb

5XX]hcbU'XYHJ]g

Mci 'k]'k f]hŸ'Ub'YggUmUVci hYj]XYbW!VUgYX'fUbg]hcb'dfUW]VWg'Zcf'U'gh XYbhk]h'U'X]gUV]']m
i bXYf[c]b['fUbg]hcb'Zca'cbY'gVX'cc''ghU[Y'hc'UbchYf" H\]g'YggUm'g\ci 'X'VY'Xci V'Y!gdUW'X'UbX'k f]hŸb
]b'5D5'gmiY""H\Y'dfUW]VWg'j]b'mci f'YggUma i ghVY'gi ddcfŸX'Vm'j]b_g'hc'fYgYUfW''j]hŸUhi fY'di V'j]g\YX'j]b'U
j Uf]YhmicZei U']mi'ci fbU'gž]b'h\Y'Ugh%'mYUfg" Mci 'a i gh'U'gc'g'g'fY'Yj UbhdfYgW]VYX'UbX'f'UXX]hcbU'
Wci fgY'fYUX]b[g'hc'gi ddcfŸmci f'fYgdcbgY"

D'YUg'Y'gYY'A ccX'Y!'5ggYgga YbhHUg_'5fYU'Zcf'a cfY'j]bZcfa Uh]cb"

5ggYgga Ybh& ɁX]j]Xi U' HfUbg]hcb'D`Ub

8i Y'XUHŸ. '%&# \$, #&\$&&\$) . \$\$ 'DA

HUg_ &! 'ɁX]j]Xi U' HfUbg]hcb'D`Ub!' '\$\$ 'k cfXg

Gh XYbŸg'k]'fYVW]j Y'k f]hŸb'ZYXVUW_k]h]b'%\$'k cf_]b['XUm'cZgi Va]gg]cb

H\]g'j]g'h\Y'Z]bU'UggYgga Ybh'

5XX]hcbU'XYHJ]g

Mci 'k]'XYj Y'cd'Už' \mčhYh]W]'cf'fYU'ž'gh XYbH'Zc'W'gYX'j]bX]j]Xi U' HfUbg]hcb'd'Ub'Zcf'U'gh XYbhk]h'U
X]gUV]']mhc'gi ddcfŸhŸY]f'dcgh'gVX'cc''Ugd]fU]hcbg" Mci f'd'Ub'k]'j]bWi XY'dcgh'gVX'cc''Ya d'cma YbŸž
YXi W]hcbž'UbX'j]bXYdYbXYbh'j]j]b['[cU'g''k]'j]bX]W]hŸ'k \]W'gYfj]W'g'UbX'gi ddcfŸg'k]'VY'fYei]fYX'hc
Ugg]ghhŸY'gh XYbh'hc'fYUW' hŸY]f'dcgh'gVX'cc''j]Z'[cU'g' Mci 'k]'U'gc'g'g'ck' hŸY'W'bbYW]hcb'cZhŸY'gi V'YVWg
hŸY'gh XYbhk]'gh X'mZcf'GHU[Y'*" Mci 'k]'U'gc'j]bWi XY'f]U]b[i 'UHŸX'→D'fUbg]hcb[cU'g"

D'YUg'Y'gYY'A ccX'Y!'5ggYgga YbhHUg_'5fYU'Zcf'a cfY'j]bZcfa Uh]cb"

F I 6F 7 # 998657? 'G<99H

98GH) %&- 'HF 5BG#H€BG 'B 'H<9 '@= 9G'C: 'GHI 89BHG 'K #H<

8 G56 @H9G

I BGK 'G7 <CC@'C: '98I 75H€B

5ggYgga YbhHUg_% '9ggUm

GdYWZjW7 fJHyfjU	1fŁ ————— 2fŁŁ				

GdYWZjW7 f]hYf]U

11fł ————— 2fłł

DfYgYbHh]cb`cZfYgdcbgY`UWw`fX]b[`hc`Uddfcd]Uhy`UWUXYa]WUbx
`]b[i]gh]Ww`bj Ybh]cbg

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<p>K YY_+. '%>i `m! `%) >i `m</p>	<p>GYa]bUf</p>	<p>HfUbg]h]cb `Zfca `df]a Ufmihc `gYWcbXUfmgWcc` HfUbg]h]cb `Zfca `gYWcbXUfmgWcc`hc `dcgH gWcc`"]ZY `f#]g `DYUVcXm `cb]bY `a cXi `Y!` UgmbW fcbci g</p>
<p>K YY_ ; . '% `>i `m! `&& >i `m</p>	<p>GYa]bUf</p>	<p>8Yj Y`cd]b[`UbX `HYUW]b[`hY `HfUbg]h]cb `⇒D</p>
<p>K YY_ - . `&) `>i `m! `&- >i `m</p>	<p>GYa]bUf</p>	<p>HfUbg]h]cbg `hc #Zfca `gdYW]U `gWcc`# b]h gYh]b[g `VUW `hc `a U]bghfYUa `f[i YghgdYU_Yf!` HfUbg]h]cbg `hc #Zfca `↑ j Yb] `Y `↑ gh]W `gYh]b[g f#]g `DYUVcXmcb `]bY `a cXi `Y!` UgmbW fcbci g</p>
	<p>5ggYgga Ybh</p>	<p>9ggUm</p>
<p>K YY_ %\$. '%5i [i gh! `) 5i [i gh</p>	<p>GYa]bUf</p>	<p>7ci fgY `k fUd!i d E / `5 `Zcf `Z]bU `UggYgga Ybh]Ug_</p>

F Ygci fWg

DfYgWf]VYX F Ygci fWg

DfYgWf]VYX HYI h

- GfbcXcj ½=" / '7i a a]b[žH"A "f&\$%*Ł">ZVdaR_ eR_dZ_d R_U UZRSZġ , 3 Y`]ZēT aVcdaVTēgV"
@cbXcb. F ci hYX[Y"5j U]UV`Y`]b`hY`I BGK `Vcc_g\cd"

DfYgWf]VYX F YUX]b[g.

GYY`A ccX`Y`Zcf`UXX]hcbU`dfYgWf]VYX`fYUX]b[g"

F YWc a a YbXYX`HYI hg.

- 6cghcWž>"ž/ `K ccXž>"f&\$%) Ł" f aa` œZ_X df UV_e eR_dZ_d #&ž#+ž3aac` RTYVd è eVRTYZ_X
R_U]VRc_Z_X"@cbXcb. F ci hYX[Y"
- 7`Uf_ž<"6"ž/ `l bfi \ž8"? "f&\$-\$- Ł"HfUbg]hcb`cZmci h`UbX`mci b[`UXi `hg`k`]h`Ya`chcbU`cf
VY\Uj]ci fU`X]Z]W`hYg"5b`Yj]XYbW!gi ddcf hYX`UbXVcc_"6U`hja`cfYž`A 5. `DUi ``6fcc_Yg"
-

Gi Va]gg]cb'cZ5ggYgga YbhiHUg_g

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

≠Zmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UH'Ya dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfh'cb'-' ,) " ' ' %cf'Ya U] 'H'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY' , .\$Ua '—%\$. \$\$da 'cb'k YY_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY_YbXg'f1 *) 'XUmg'U'm'UfL" ≠Zmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]H'Hi fb]h]b'mci 'a UmiUdd'm'Z'f'Ub'YI HYbg]cbž'Vi hmc i

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

D`U[]Uf]ga `]g`i g]b[`h`Y`k cfXg`cf`]XYUg`cZc`h`Yfg`UbX`dFYgYbh]b[`h`Ya `Ug`mci f`ck b``#WU`b`hU`_Y`a`Ubm`
Zcfa gZ`Zca `XY`]VYfU`h`V`X`Y`U`h]b[`h`c`U`W`Y`X`Y`b`h`U`m`W`c`d`m]b[`Z`ca `U`gci f`W`k`]h`ci`h`U`W`_`b`c`k`Y`X[`Ya`Y`b`h`

I BGK `[fci dg`d`U[]Uf]ga `]b`h`c`h`Y`Z`c``ck`]b[`W`U`h`Y[`cf]Yg.

7cdm]b[.`I`g]b[`h`Y`g`Ua`Y`cf`j`Y`fmg]a`]U`f`k`cf`X`g`h`c`h`Y`cf][`]b`U`h`Y`h`cf`]X`Y`U`k`]h`ci`h`U`W`_`b`c`k`Y`X[`]b[`h`Y`
gci f`W`_`cf`i`g]b[`ei`c`h`U`h`c`b`a`U`f`_`g``H`g]b`W`i`X`Y`g`W`c`d`m]b[`a`U`h`f]U`g`z`]X`Y`U`g`c`f`W`c`b`W`d`h`g`Z`ca`U`V`cc`_`z`U`f`h]W`Y`z`

5 WUXYa]W=Zcfa Uh]cb

8i Y`tc`Yj`c`j`]b[`UXj`]W`VmB`GK` `<YU`h`z`gh`XYbh`a`i`gh`WXYW`Zc`f`i`dXU`h`X`]bZc`fa`Uh]cb`fY[`UfX]b[`cb`]bY`YUfb]b[`Zc`f`U`5`f`g`z`8`Yg][`b`UbX`5`f`W`]h`W`i`f`Y`W`i`f`g`Y`g`h`]g`h`f`a``f`j`]U`A`ccX`Y`c`f`W`i`f`g`Y`]bZc`fa`Uh]cb`dfcj`]XYX`Ł

: cf`YggYbh]U`gh`XYbh]bZc`fa`Uh]cb`fY`Uh]b[`tc.

- fYei`Ygth`Zc`f`YI`h`bg]cb/
- `UH`gi`Va`]gg]cbg`[`i`]XY`]bYg/
- fYj`]Yk`cZa`Uf_g/
- I`B`G`K` `<YU`h`UbX`GUZ`h`m`d`c`]W`Y`g/
- YI`Ua`]bUh]cb`dfc`W`X`i`f`Y`g/
-