



MDIA5100

ⓧXi ghfm ⓧhY fbg\jd

HYfa `Cby`##`&\$&%

GWXcc`cZHA Y`5ftg`UbX`A`YXJU`..#`I`BGK`..5ftg`UbX`GcWJU`..GWYbWg



7ci fgY`Cj Yfj]Yk

GHJZZ7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWJhcb	D\cbY
9a a U`5`">UbY	Ya a U"AbY4 i bgk "YXi "Ui	6mUddc]bha Ybh		

GW\cc`7cbHJW`bZcfa Uh]cb

GW\cc`cZhY`5frg`UbX`A YX]U

Fcca " %&ž@Yj Y` žF cVYfhK YVghYf`6i]X]b[`f] %Ł

D\cbY. f\$&Ł- ' ,) (,) *

9a Uj]: [gUa 4 i bgk "YXi "Ui](#)

K YVg]h: [k k k "Ufrg"i bgk "YXi "Ui #gUa](#)

H\Y`GW\cc`cZhY`5frg`UbX`A YX]U`k ci `X`_]Y`hc`F YgdYWw`m5W_bck`YX[Y`hY`HfUX]hcbU`7i ghcX]Ubgž
hY`6YXY[U`fP`Ybg]b[hcb`WJa di gŁž; UX][U`f7]mUbX`5fhi`8Yg][b`7 Ua di gYgŁ`UbX`hY`B [i bbUk U`
dYcd`Y`f5i gLfU]Ub`8YZYbVW : cfVW`5WUXYa m]b`7 UbVYffUŁcZhY`UbXg`k \YfY`YUW`WJa di g`cZI`BGK`]g
`cWJhYX"

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`*`

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

H\]g`Wci fgY`cZYfYX`Vmi`h`Y`G`W`cc`c`Z`h`Y`5`f`g`U`b`X`A`Y`X`U`d`f`c`j`]`X`Y`g`m`e`i` `k`]`h` `U`b` `c`d`d`c`f`h` `b`]`h`m`i`c`
i`b`X`Y`f`U`_`Y` `]`b`X`i`g`h`f`m`Y`b`[`U`[`Y`X` `Y`U`f`b`]`b`[` `h`f`c`i` [` \ `]`b`h`f`b`g` \ `]`d` `c`d`d`c`f`h` `b`]`h`Y`g` `k`]`h` `f`Y`Y`j` `U`b`h`]`b`X`i`g`h`f`m` \ `c`g`h`g`"
`X`Y`U` `n`z`m`e`i` `k`]` `i` `b`X`Y`f`U`_`Y` `U`b` `]`b`h`f`b`g` \ `]`d` `U`Z`h`f`m`e`i` ` \ `U`j` `Y` `W`c`a` `d` `Y`h`Y`X` `U` `m`Y`U`f`c`Z`Z` ` `!`h`a` `Y` `g`h`i` `X`m`f`c`f`
`Y`e`i` `]` `U` `Y` `b` `h` ` ` `5` `h` `h` `Y` `Y` `b` `X` ` `c` `Z` `h` `Y` `]` `b` `h` `f` `b` `g` ` \ `]` `d` `m`e`i` ` `k`]` ` `d` `f` `c` `j` `]` `X` `Y` `U` `g`i` `a` `a` `U`h`j` `Y` `f` `Y` `d` `c` `f` `h` `c` `Z` `m`e`i` `f` `Y` `I` `d` `Y` `f` `]` `Y` `b` `W` `g` `U` `b` `X`
`k` `c` `f` ` _ `Y` `I` `U` `a` `d` `Y` `g` `W` `c` `a` `d` `Y` `h` `Y` `X` `X`i` `f` `]` `b` [`h` `Y` `]` `b` `h` `f` `b` `g` ` \ `]` `d` "

H\Y` `]` `b` `h` `f` `b` `g` ` \ `]` `d` `f` `Y` `e`i` `]` `f` `Y` `g` `U` ` `h` `c` `h` `U` ` `W` `c` `a` `a` `]` `h` `a` `Y` `b` `h` `c` `Z` `%` \$` !` %` \$` ` \ `c`i` `f`g` `c`Z` `k` `c`f` ` _ `k`]`h` `U` ` \ `c`g`h`c`f` [`U`b`]`g`U`h`c`b` `U`b`X` `W`U`b` `V`Y`
`h`U`_`Y`b` `]`b` `Z`f`g`h`z`g`Y`W`c`b`X` `c`f` `h` `]`f`X` `h`Y`f`a` `z`c`f`c`j` `Y`f` `h`Y` `g`i` `a` `a` `Y`f` `d` `Y` `f` `]` `c` `X` " ` `b` `h` `f` `b` `g` ` \ `]` `d` `c`d`d`c`f`h` `b`]`h`Y`g` `U`f`Y` `U`X`j` `Y`f`h`g`Y`X` `j` `]`U`
`h`Y` `: 5GGSK` @SG5A` ` `b` `h` `f` `b` `g` ` \ `]` `d`
`d`U`[`Y` `: \h`d`g` `##a` `cc`X`Y`" `h` `i` `b`g`k` "YXi` "Ui` # `W`c`i` `f`g`Y`#`]Yk` "d` \ `d`3`]X1` ` ` `) ` %` (" `5` `h` `f` `b` `U` `h` `j` `Y` `n`z`m`e`i` ` `a` `U`m`]`b`X`Y`d`Y`b`X`Y`b`h`m`
`U`d`d`f`c`U`W` `U` `f` `Y` `j` `U`b`h`c`f` [`U`b`]`g`U`h`c`b` `h`c` `U`d`d` `m`i`z`c`f` `U`b` `]` `b` `h` `f` `b` `g` ` \ `]` `d` " `D`f`]`c`f` `h`c` `g`Y`Y`_`]`b` [` `U`b` `]` `b` `h` `f` `b` `g` ` \ `]` `d` `z`m`e`i` ` `a` `U`m`k` `]`g` \`
`h`c` `W`c`b`h`U`W`h`i` `B`G`K` `7` `U`f`Y`f`g` `U`b`X` `9`a` `d` `c`m`a` `Y`b`h`!` \h`d`g` `##k` `k` `k` "WUfYfYfg`"i` `b`g`k` "YXi` "Ui` #` `Z`c`f` ` \ `Y` `d` `U`g`g`Y`a` `V` `]` `b` [` `m`e`i` `f` `7` `J` `z` `W`c`j` `Y`f` ` `Y` `h`Y`f`z` `U`b`X` `c`h` `Y` `f` `W`c`a` `d` `c`b` `Y` `b` `h` `g` ` `c` `Z` `m`e`i` `f` `U`d`d` `]` `W` `h` `c` `b` "

: `c`f` `a` `c`f`Y` `]` `b` `z` `c` `f` `a` `U`h`c`b`z`j` `]`g`h` \h`d`g` `##k` `k` `k` "Uf`g`"i` `b`g`k` "YXi` "Ui` #`g`U`a` #`g`h`i` `X`m`i` `g`#`b`h`f`b`g` \ `]` `d`g` " : `c`f` `U`b`m`Y`b`e`i` `]`f`]`Y`g`z`
`d` `Y`U`g`Y` `Y`a` `U`]` `h` `Y` `K` @ `I` `b`]`h`U`h` : 5GG!K` @4` `i` `b`g`k` "YXi` "Ui`

Hc`V`Y`Y`][` `]` `Y` `Z` `c` `f` `h` `]` `g` `W` `c`i` `f` `g` `Y` `z` `m`e`i` ` `a` `i` `g`h` \ `U`j` `Y` `U` `a` `]` `b` `]` `a` `i` `a` ` `K` `5` `A` ` `c` `Z` `*`) "

7ci fgY`@YUfb]b[`Ci hWca Yg

%` ` \ `U`j` `Y` [`U`]`b`Y`X` `Y` `I` `d` `Y` `f` `]` `Y` `b` `W` ` `c` `Z` `]` `b` `X`i`g`h`f`m`d`f`c`W`g`g`Y`g` `U`b`X` `d` `f` `U` `W` `]` `W` `g`
& " `U`d`d` `m`i`h` `Y` `c` `f` `Y` `h` `]` `W` ` `W` `c` `b` `W` `d` `h`g` `U`b`X` `d` `f` `U` `W` `]` `W` `]` `g` `]` `g` [`U`]`b`Y`X` `]` `b` `h` `Y` `d` `f` `c` [`f`U`a` ` `h`c` `f`Y`U`!`k` `c`f`X` `W`c`b`h`I` `h`g`
' ` ` \ `U`j` `Y` `Y` `b` ` \ `U`b` `W` `X` ` `h` `Y` `]` `f` `W` `U` `d` `U` `W` `]` `m`i`z`c`f` `]` `b` `X` `Y` `d` `Y` `b` `X` `Y` `b` `h` `Y` `b` [`U` [`Y`a` `Y` `b` `h`k` `]` `h` `]` `b` `X`i`g`h`f`m`d`f`c`j` `]` `X` `Y` `f`g`

HYUWX`]b[`G`h`f`U`h`Y`[`]`Y`g`

5ggYgga Ybh

H\]g'gi VYWh]g'i b[fUXYX'gc'U'dUgg'jg'XYdYbXYbhcb'GUhgZUWc'fmfGMŁ'cf'I bgUHjgZUWc'fmfI @Ł]b'a YYh]b[hY'Wci fgY'fYei]fYa Ybhg'"5b'GM[fUXY'k]"bchUZYWhmci f'k Y][\hYX'Uj YfU[Y'a Uf_'fK 5A Ł'Vi hU': @[fUXY k]"'Hc'fYW]j Y'U'GUhgZUWc'fm[fUXY'Zc'f'k]g'Wci fgYžmci 'k]"bYYX'hc.

- %" 7ca d'YH'U'Ugh%\$\$\ci fg'cZmci f']bh'fbg\jd"
- &" 7ca d'YH'U'bx'gi Va]hU'H]a Yg\YYhg\ck]b['hY'\ci fg'mci 'k cf_YX'Xi f]b['mci f']bh'fbg\jd
- ' " 7ca d'YH'U'Gh XYbh: YYXVUW_': cfa "
- (" 5g_mci f'gi dYf]]gcf'hc'Wca d'YH'U'<cgh: YYXVUW_': cfa "
-)" 7ca d'YH'U'bx'gi Va]h'mci f'K cf_'9j]XYbW'f'kYa cbghfU]b['U'gYf]ci g'U'f'Ya dh'hc'U'bgk Yf'hY'fUg_ fYei]fYa Ybhg'Ł"
- *" 7ca d'YH'U'bx'gi Va]h'mci f'7 f]h]W'f'ZYW]cb'f'kYa cbghfU]b['U'gYf]ci g'U'f'Ya dh'hc'U'bgk Yf'hY'fUg_ fYei]fYa Ybhg'Ł"

5ggYgga YbhHUg_g

5ggYgga YbhHUg_g	K Y][\h	8i Y'8UH	Gh XYbh@Yufb]b[Ci hWca Yg'5ggYggYX
7 f]h]W'f'ZYW]cb') \$i	&' #\$(#&\$&\$) . \$\$'DA	%ž&
K cf_'9j]XYbW') \$i	&\$#%#&\$&\$) . \$\$'DA	%ž'

5ggYgga Ybh8YH]g

5ggYgga Ybh% '7 f]h]W'f'ZYW]cb

@Yb[h. 'A]b]a i a 'cZ) \$\$'k cfXg'f'cf'ci [\ 'Yei]j U'YbhZc'f'bcbl'hl' hVUgYX'gi Va]gg]cbgŁ'Vi ha Uma U_Y'i d'a cfY'cZ'hY'%) \$\$'hc'&) \$\$'k cfXg'f'Yei]fYX'Zc'f'Vch'Ugg][ba Ybhg]b'k]g'Wci fgY"

8YH]g.

Gh XYbhg'k]"gi Va]hU'W]h]W'f'ZYW]cb'k \]W'f]Ł'Vf]YzmXYgW]VYg'hY'hmdY'cZa YX]U'cf[Ub]nU]cb'hYm k YfY'd'UW'X'j]b'f]b[]YbYfU'f'Yfa g'cb'nž'k]h'ci hbUa]b[Ł'U'bx'hY]f'fc'Y'k]h]b']h'f]Ł']XYbh]Z]Yg'U'fY'Yj Ubhfc'Y]b'hY'cf[Ub]nU]cb'U'hc'f'WcgY'hc'Y'bfm'Yj Y'U'bx'hY'g_]g'U'bx'U'f]Vi h'g'bYYXYX'hc'Wca d'YH'gi W'U'fc'Y/f]Ł]Ł'U'X'fYggYg'\ck' hY'hmdY'cZk cf_'hY'm\Uj Y'i bXYfU_Yb#Ł'fcXi W'X'Xi f]b['hY]f'd'U'W'a Ybh'W'bf]Vi h'g'hc' hY]f'Ł'cg'hc'f[Ub]nU]cb'U'bx'Ł'f'Y'Yj Ubha YX]U']bXi g'f'm'Ł' h]g'U'gh'Wca d'cbYbhgh'XYbhg'g'Ł'ci 'X'Yi d']W]hm fYZYW'cb'gi W'ZU'W'fg'Ug'hY'\cgh#bXi g'f'mU[YbXUž'W'U'Yb[Yg'U'bx']bbcj U]h]cbg'Zc'f'hY'\cgh#bXi g'f'mž ei Yg]h]cbg'cZ'h]W]g'k \]W'a UmUf]gY]b'fY'U]h]cb'hc'h]g'k cf_ž'ei Yg]h]cbg'cZ]bXi g'f'm]g'U'bx'U'f'Xgž']bXi g'f'm d'fc'W'ggYg'cf'a YX]U'Zc'fa g'"5W'X'Ya]W'fY'Z'f'YbW'g'Ł'ci 'X'VY'a UXYž'i g]b['hY'<Uf] U'f'g'm]h'Ya ž'U'bx'U a]b]a i a 'cZ]j Y'gYdU'f'U'f'U'W'X'Ya]W'gci f'W'g'i gYXž'hc'gi d'c'f'h'Ł' d'U]b#XY]bY'hY'fY'Yj Ubh'W'cb'W'dhg'"hY' fYZYW]j Y'U'bx'U'g]g'Ug'U'k \c'Y'g'Ł'ci 'X'VY'U'a]b]a i a 'cZ) \$\$'k cfXg'Vi ha Uma U_Y'i d'a cfY'cZ'hY' Wca V]bYX'hc'U'cZ%) \$\$i&) \$\$'k cfX']a]h'Zc'f'Vch'UggYgga Ybh'Wca d'cbYbhg"

; fUX]b['k]"VY'GUhgZUWc'fm# bgUHjgZUWc'fmc'b'mUbX'bc'ž' f'hY'f'ZYXVUW_ 'k]"VY'dfcj]XYX"

5XX]h]cbU'XYH]g.

5ggYgga Ybh&. K cf_9j]XYbW

@Yb[h. A]b]a i a cZ&) \$'k cfXg'f'f'fci [\ 'Yei]j U'YbhZcf'bcbl!hI hVUgYX'gi Va]gg]cbgkVi ha Uma U_Y'i d a cfY'cZhY'%) \$\$'hc'&) \$\$'k cfXg'f'Yei]fYX'Zcf'Vch'Ugg][ba Ybhg]b'h.]g'Wci fgY"

8YhU]g.

Gh XYbhg'k]'dfYgYbhU'gUa d'Y'cZ'fYdcf'g'cbZcf''b_g'hc'cf][]bU'k cf_i bXYfU_Yb#dfcXi W'X'Xi f]b['UbX Zcf'hY'di fdcgYg'cZhY']bh'fbg\jd''H\]g'a UmVY'U'lc']gh]Wk f]hYb'XcW a YbhfY ['bYk g'g'hc'f'W]YbhdfcZ]Y YhW'cf'fY'W'fXg'cZfYgYUfW' i bXYfU_Yb'hc'dfYdUfY'Zcf'U'XcW a Ybh#j Ybh#dfcW'gg]b'hY'\cg'hc'f[Ub]nU]cbZ fYdcf]b['cb'hUg_g'i bXYfU_YbZ'XYgW]dh]cb'cZk cf_Zck]b'fY'U]cb'hc'U'Uf[Yf'dfcW'ggZ'cf'g]a]'UfZ'Y']h g\ci 'X'dfcj]XY'Yj]XYbW'cZdfUW]W'k cf_i bXYfU_Yb'Xi f]b['hY'd'UW' a Ybh'h\]g'g\ci 'X'VY'U'a]b]a i a cZ&) \$'k cfXg'Vi ha Uma U_Y'i d'a cfY'cZhY'W'ca V]bYX'hc'U'cZ%) \$\$!&) \$\$'k cfXg'Zcf'Vch'UggYgga Ybh W'ca dcbYbhg"

; fUX]b['k]''VY'GUh]gZJW'cf'm# bgU]gZJW'cf'mcb'mUbX'bc'Z f'hYf'ZYXVUW_k]''VY'dfcj]XYX"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

D`YUgY`k cf_`h\fc i [\`h\Y`cbVcUfX]b[`_]hmc i f i`Z]bX`cb`A ccX`Y`VYZcfY`Wca a YbW]b[`mci f`]bHfYfbg\]d``C h\Yf
\Y`dZ ``fYgci fWg`W]b`VY`Zci bX`cb`h\Y`Wci fgY`A ccX`Y`g]h`"

F YWca a YbXYX`F Ygci fWg

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

K Y`fYgdc bX`hc`ZYXVUW`fYW]j YX`j]U`X]fYWh`Ya U]`hc`h\Y`7ci fgY`7cbj Ybcf`UbX`h\Y`K @`I b]h`UbX
]bZcfa Uh]cb`dfcj]XYX`]b`h\Y`gh XYbhUbX`\cghZYXVUW`Zcfa g`"

K Y`\cdY`mci `Yb`emimci f`]bHfYfbg\]d`

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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

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

D`U[]Uf]ga `]g`i g]b[`hY`k cfXg`cf`]XYUg`cZc`hYfg`UbX`dfYgYbh]b[`hYa `Ug`mci f`ck b" `#WUb`hU`Y`a Ubm
Zcfa gZ`Zca `XY`]VYfU`h`V`X`Y`U`h]b[`h`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[`Y`a `Y`b`h`

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

7 cdm]b[.`i`g]b[`h`Y`g`U`a `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`

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'I gY'cZ
I BGK '⇒H'F Ygci fW'g'Dc`]Wñ

5 WUXYa]W=Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.

- fYei Ygth`Zc`Yl H`bg]cb/
- `Uh`gi Va]gg]cbg`[i]XY`]bYg/