



ARTS2876

I bXYfghUbX]b['h\Y'GY`Z

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

GWcc`cZGcWJU`GWYbWg`#`I BGK ``5ftg`UbX`GcWJU`GWYbWg



7ci fgY`Cj Yfj JYk

`GHUZZ7cbhUW`i8YHJ`g`

`7cbj Ybcfg`

B Ua Y	9a Uj`	5j Uj`UVj`]m	@cWUj`cb	D\cbY
A Y`Ub]Y`K \]hY	a Y`Ub]Y`k \]hY4 i bgk "YXi "Ui	K YXbYgXUmj %%Ja !%&da `UbX H\i fgXUmj %%Ja !%&da ž'cf`Vm Uddc]bha Ybh	A 6%*'	- ' ,) `&' \$(

`Hi hcfg`

B Ua Y	9a Uj`	5j Uj`UVj`]m	@cWUj`cb	D\cbY
F jW`jY!@YY A W@Ui f]b!Ga]h	f`a WUi f]b!ga]h4 i bgk "YXi "Ui	H68	H68	H68

GWXcc``7cbhUW`i`bZcfa Uh]cb

GWXcc``cZGcWU`GWYbWg

Fcca `%) -

A cfj Yb`6fck b`7&\$

Ya Uj`.gcgg4 i bgk "YXi "Ui

d\cbY. '\$&-' ,) `)% \$+

7 ci fgY'8YHJ]`g

7 fYX]h'Dc]bHg '*`

Gi a a UfmcZ'h\Y'7 ci fgY

9UW'cZi g'\Ug'U'gY'ZUbX'Ub']XYbh]mVmj]fhi Y'cZVY]b['\i a Ub''6i hXc'ch\Yf''j]]b['VY]b[g'\Uj Y'U'gY'Z3
8c'ch\Yf''j]]b['VY]b[g'\Uj Y'gcW]Ym]b'h\Y'gUa Y'k Um\i a Ubg'Xc3''6'h]g'W'ci fgY'Z'mci 'k]' 'W'bg]XYf'gca Y
hUX]h]cbU'Uggi a dh]cbg'cZgY'Z'ccX'fY"["z'h\Y'W'dUW]m'Z'f'fYUgcb'z'gdYYW'z'UbX'a Ya'c'f'm'Z'f'ca 'U'f'Ub[Y'cZ

Hi hf]U`g. 'Hi hf]U`g`k]`VY`i`gYX`hc`cf[Ub]gY`ga U`"[fci dg`hc`YghUV`]g\`U`Wc`UVcfUHj`Y`k`cf_]b[
Ybj]fcba Ybhk \YfY`gh XYbthg`WUb`YUfb`Zca`cbY`UbcH\YF"

F YUX]b[`E i Ygh]cbg. `: cf`YUW`k`YY_`m`fYUX]b[žmci`k]`Z]bX`fYUX]b[`Wc`a`dfY\Ybg]cb`ei`Ygh]cbg`dcgh`X`hc`
H\Y`I`b]j`Yfg]m@A`G`"H\YgY`k]`"Y`d`hc`cf]Ybhmc`i`k]H`fYgdYWhc`H\Y`Uf[i`a`Ybthg`dfYgYbh`X`]b`H\Y`
Ugg][bYX`fYUX]b[g"

5ggYgga Ybh

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UHŸ	Gh XYbh@YUfb]b[Ci hŸa Yg'5ggYggYX
K cf_Vcc_`) \$i	- 'A UfWŸ'fK YY_g'&/ ' ' Ÿ/&+ 5df]'fK YY_g'('hŸ %\$Ÿ	&ž
; fci d': UWŸ]hŸ]cb`	&\$i	K YY_g'(ž) ž+ž, 'UbX'-'	%ž
9ggUmi	' \$i	%A Um&\$&\$'Uh%%) - 'd"a "	%ž&ž(

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% 'K cf_Vcc_`

GhŸfhXUHŸ.`

@Yb[hŸ. '5ddfcl]a UHŸ`m) \$\$'k cfXg'dYf'k YY_`

8YHU]`g. 'Gh XYbhŸ'k]''dfYdUfY'k f]hŸ'b'YbhŸ]Yg'cZ%&'dU[Yg'cb'hŸY'Ugg][bYX'fYUX]b[g'YUWŸ'k YY_'HŸY
k cf_'k]''VY'gi Va]hŸX'UbX'UggYggYX'dYf]cX]WŸ''mihŸfci [\ 'hŸY'hŸfa ": YYXVUW_.'K f]hŸ'b'WŸa a YbhŸ'UbX
[fUXYX'U[U]bghU'WŸ]hŸf]U'g\YYh'

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

Mci 'k]''gi Va]hŸci f'k cf_Vcc_'YbhŸ]Yg'žcf'K YY_g'&'UbX'' 'cb'-' 'A UfWŸ '&\$&\$'žcf'[fUXYX'žYXVUW_''

5ggYgga Ybh' . '9ggUm

GhUfhXUHy . '

@Yb[h. '%) \$\$'k cfXg

8YHJ]g. 'Gh XYbHg'k]''k f]h' 'Ub'YggUmf%) \$\$'k cfXgE'hUhfYZYWg'cb'&!' 'W]h]WJ''YUfb]b['YI dYf]YbWg:]b
fY'Uh]cb'hc 'Wci fgY'Wcbh'Yb'h'H\]g]g'hY'Z]bU'UggYgga Ybh]b'hY'Wci fgY": YYXVUW_ 'K f]h]b'Wca a Ybh]b'UbX
[fUXYX'U[U]bghU'W]h]f]U'g\YYh'

5XX]h]cbU'XYHJ]g.

H\Y'YggUm]g'Xi Y'cb '%A Um&\$\$'Uh%%) - 'd"a "

Hi fb]h]b'gYh]b[. 'H\]g'Ugg][ba Ybh]g]gi Va]h]X'h]fci [\ 'Hi fb]h]b'UbX'ghi XYbh]g'WU'gYY'Hi fb]h]b'g]a]'Uf]hm
fYdcfng"

5 HbXUbW F Yei]fYa Ybhg

	F YUX]b[8 Yff]XUž>UWēi Yg f0% - +@\$\$ (Ł'H\Y'5b]a U`H\Uh H\YfYZcfY'≡5a fA cfY'Hc': c`ck Ł'đ'A UH\Yk 7 U'UfWē'5bX'DYfYf'5HfYfrcb'f0Xg"Ł'3` [S^ BZ[āeabZk

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

Df]bhWcd]Yg'cZhY`k YY_mUgg][bYX`fYUX]b[g`Uj Y`VYb`Wca d]YX`]bhc`Ub`f5F HG&, +*`Gh`Xm?]frik`\\Wk`]g Uj U]UV`Y`Zcf`di fWkUgY`UhhY`I`BGK`'6cc_g\cd""9`YWfcb]Mwcd]Yg'cZhY`fYUX]b[g`UfY`Ugc`Uj U]UV`Y`cb hY`5F HG&, +*`A`ccX`Y`dU[Y.`[\hkd.#a`ccX`Y`h`fi`bgk`"YXi`"Ui](#)

F YWca a YbXYX`F Ygci fWg

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

Gh`XYbhZYXVUW_k]`VY [UhYfYX`h`fci [\`a`m9I`dYf]YbW`gi`fj`YmgZ`UbX`mci`k]`VY []j`Yb`cddcfh`b]h]Yg h`fci [\`ci`h`hY`gYa`YghY`f`h`c []j`Y`]b`Zcfa`U`ZYXVUW`"H\Y`"Ugh]a`Y`=hUi [\h3DFE`\$*) (G`VWdefS`V[`Y`fZW`E`WXk`Ug`]b`&\$%-`"H\]g`Wc`cfhcZgh`XYbhg`[Uj`Y`dcg]h] Y`ZYXVUW`cb`hY`Wci`fgY"

6UgYX`cb`h`lg`ZYXVUW_z`=\Uj`Y`a`UXY`hY`Z`ck`]b[`WkUb[`Yg`h`hY`Wci`fgY.

%`7`cbh`bh!`=\Uj`Y`a`cX]ZYX`hY`Wc`bh`bh]b`cfXY`f`h`df]j`]Y[`Y`XYd`h`fU`hY`f`h`Ub`VfYUX`h`[]j`Yb`hY`dfYggi`fYg`cZ`hY`hf]a`YghY`f`gmghYa`/`

&`5bbci`bW`a`Ybhg`!`=k`]`i`d`cUX`j`]XYc`gY[`a`Ybhg`h`A`ccX`Y`]b`cfXY`f`h`UXXfYgg`]ggi`Yg`fY`U`hYX`h`c`UggYgga`Ybh`UbX`Wci`fgY`Vi`g]bYgg`"H\]g`k`]`[]j`Y`i`g`a`cfY`h]a`Y`]b`\$`U\`

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Hi fb]hb`Gi Va]gg]cb

Ʒmci`YbWci`bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]hb`z`d`YUgY`
H`Y`d`l`cb`Y`9I`H`f`b`U`Gi`ddcfh`cb`-`,`),`"`,`'`,`%`cf`Ya`U]`h`Ya`cb`YI`H`f`b`U`H`f`gi`ddcfh`4`i`bgk`"YXi`"Ui`"Gi`ddcfh`
`l`ci`fg`UfY`,`.\$\$Ua`-`%\$.\$\$da`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`cb`k`YY`YbXg`f`l`*)`XUmg`U`m`Y`Uf`l`"Ʒmci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]hb`mci`a`Um`Udd`m`Z`f`Ub`YI`H`f`bg]cb`z`Vi`hmc`i`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`h`bi`a`VY`f`Z`ca`9I`H`f`b`U`Gi`ddcfh`f`U`cb[`k`]h`Ub`m`c`h`Y`f`f`Y`j`Ub`h`X`c`W`a`Y`b`h`g`l`hc`
]b`W`i`X`Y`U`g`Y`j`]X`Y`b`W`hc`gi`ddcfh`mci`f`YI`H`f`bg]cb`Udd`]W`h]cb"Ʒmci`Ya`U]`9I`H`f`b`U`Gi`ddcfh`mci`k`]`
Ui`hc`a`U`h]W`m`f`Y`W`]j`Y`U`h]W`Y`h`bi`a`VY`f`z`Vi`h]Z`mci`H`Y`d`l`cb`Y`mci`k`]`b`Y`Y`X`hc`gd`Y`W`Z`W`m`U`g`_`Z`f`cb`Y`
Hi`fb]hb`U`gc`d`fc`j`]X`Y`g`i`d`X`U`H`Y`g`i`cb`h`Y`j`f`g`m`g`h`Ya`g`h`U`h`g`i`cb`H`k`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Y`bh`h`U`g`_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]hb`cf`U`A`cc`X`Y`
Ugg][`ba`Y`b`h`h`b`]b`g`h`U`b`W`g`k`Y`f`Y`h`l`g`]g`b`c`h`i`d`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`H`X`i`cb`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`
U`h`f`b`U`h]j`Y`gi`Va`]gg]cb`X`Y`h]g`"

:`cf`]b`Z`c`fa`U`h]cb`cb`l`ck`hc`gi`Va`]h`Ugg][`ba`Y`b`h`g`i`cb`]b`Y`j`]U`A`cc`X`Y`.\`h`td`g`#`g`h`X`Y`b`h`i`bgk`"YXi`"Ui`#`ack`!
gi`Va`]h`Ugg][`ba`Y`b`h`a`cc`X`Y`"

5 WUXYa]W<c bYghmUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i g]b[`hY`k cfXg`cf]XYUg`cZchYfg`UbX`dfYgYbh]b[`hYa `Ug`mci f`ck b" `hWUb`hU`Y`a Ubm
Zcfa gž`Zca `XY`]VYfUHY`WXYU]b[`hc`UWV]XYbhU`mW`dm]b[`Zca `U`gci fW`k]h`ci hUW_bck`YX[Ya Ybh`

I BGK `[fci dg`d`U[]Uf]ga `]bhc`hY`Zc`ck]b[`WUHY[cf]Yg.

7 cdm]b[.`i g]b[`hY`gUa Y`cf`j Yfmg]a]Uf`k cfXg`hc`hY`cf][]bU`hYI hcf]XYU`k]h`ci hUW_bck`YX[]b[`hY`
gci fW`cf`i g]b[`ei chU]cb`a Uf_g" `H\]g`U`gc`Udd`]Yg`hc`]a U[Ygž`UfhUbX`XYg][b`dfc`YWgž`Ug`k Y`Ug`
dfYgYbhU]cbg`k \YfY`gca YcbY`dfYgYbh]g`UbchYf`g`]XYUg`cf`k cfXg`k]h`ci hWYX]h`

hUddfcdf]UHY`dUfUd`fUg]b[.`7`U`b[]b[`U`ZYk`k cfXg`UbX`d`fUgYg`k`Y`a cghmifYU]b]b[`hY`cf][]bU`
ghfi W`fY`UbX`#`f`dfc[fYgg]cb`cZ]XYUg`cZ`hY`cf][]bU`ž`UbX`]bZcfa U]cb`k]h`ci hUW_bck`YX[Ya Ybh`H\]g`U`gc`
Udd`]Yg`]b`dfYgYbhU]cbg`k \YfY`gca YcbY`dUfUd`fUgYg`UbchYf`g`]XYUg`cf`k cfXg`k]h`ci hWYX]hU`bX`hc`
d]YW]b[`hc[YhYf`ei chYg`UbX`dUfUd`fUgYg`]bhc`U`bYk`k \c`Yž`k]h`ci hUddfcdf]UHY`fYZYfYbW]b["

7 c`i g]cb.`k cf_]b[`k]h`chYfg`Vi hdUgg]b[`cZ`hY`k cf_]Ug`U`dYfgcb`g`]bX]j]Xi U`k cf_]7 c`i g]cb`U`gc`
]bWi XYg`dfcj]X]b[`mci f`k cf_]hc`UbchYf`gh`XYbhVYZc`fY`hY`Xi Y`XUHYž`cf`Zc`f`hY`di fdcgY`cZ`hY`a

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'U'g'U'X'U'f'X'g'c'Z'V'Y'\U'j]ci f'Y'I d'Y'W'X'c'Z'Y'j Y'f'm'c'b'Y'']b'U'Y'I BGK 'W'c'a a i b]m
- 'c'W'U'h'g'Y'f'j]W'g'U'bx'j'b'Z'c'f'a U'h'c'b'U'V'c'i h'i BGK 'U'bx'I BGK '@]V'f'U'f'm

Gca Y'cZ'U'g'Y'U'f'Y'U'g'k]''V'Y'Z'J'a]]U'f'U'c'm'c'i ž'c'h'Y'f'g'k]''V'Y'b'Y'k ''; U]b]b['U'g'c'X'i bXYfghUbx]b['cZU''U'Y'f'Y'U'h'X'U'g'd'Y'W'g'c'Z'9@-G'9'k]''\Y'd'm'c'i 'a U_Y'U'Y'a c'g'h'c'Z'm'c'i f'g'h X]Y'g'U'hl BGK ''

[\h'c'.#\]j' V'Y'W'f'i \]X'Y'g'' \]V'f'U'f'm'i b'g'k "Y'X'i "U'i #' \]g'Y'#\]V'c'i h'Y' \]g'Y](#)

5 WUXYa]WbZcfa Uhcb`

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

- fYei Ygh`ZcfYI hYbg]cb/