



ARTS2213

5g]Ub'Dc di`Uf'7 i`h fY

HYfa`H\ fYY`##`&\$%-

GWcc`cZ< i a Ub]hYg`UbX`@Ub[i U[Yg`##`I BGK`..5 frg`UbX`GcWU`..GWYbWg

7 ci fgY`Cj Yfj]Yk

`GHUZZ7cbhUW`i8YHU]`g`

`7cbj Ybcfg`

B Ua Y	9a U]`	5j U]UV]`]m	@cWU]hcb	D\cbY
5m Ya `9`]	U"Y`]4 i bgk "YXi "Ui	%&.\$\$!`&.\$\$: f]XUm	A 6&(&	- ' ,) ` - \$) -

`@YW`i fYfg`

B Ua Y	9a U]`	5j U]UV]`]m	@cWU]hcb	D\cbY
5m Ya `9`]	U"Y`]4 i bgk "YXi "Ui	%&.\$\$!`&.\$\$: f]XUm	A 6&(&	- ' ,) ` - \$) -

`Hi hcfg`

B Ua Y	9a U]`	5j U]UV]`]m	@cWU]hcb	D\cbY
5m Ya `9`]	U"Y`]4 i bgk "YXi "Ui	%&.\$\$!`&.\$\$: f]XUm	A 6&(&	- ' ,) ` - \$) -

GW`cc``7cbhUW`i`bZcfa U]hcb

GW`cc``cZ<i a Ub]hYg`UbX`@Jb[i U[Yg

@cWU]hcb. `GW`cc``C Z]W`zA cfj Yb`6fck b`6i]X]b[z`@Yj Y``&z&),

C dYb]b[`<ci fg. `A cbXUm! `: f]XUmz`- Ua `!`) da

D\cbY. `Z`*%&`- ' ,) `* , %

: U! . `Z`*%&`- ' ,) `; , +\$)

9a U]. [\U`4 i bgk "YXi "Ui](#)

7 ci fgY'8YHJ)`g

7 fYX]hDc]bhr '*`

Gi a a UfmcZ\hY'7 ci fgY

Gi VYWh5fYU.'3e[S` E fgV[Mé

H\]g`Wéi fgY`WU`U'gc`VY`gh`X]YX`]b`hY`Zc`ck`]b[`gdYWU`]gU]cbg.'5 Z[`WéWE fgV[Mé`

5g]U'g`fUd]X`mVX`Ub[]b[`gcWU`U`bX`dc`]h]WU`Wé`bH]i`h]g`Wé`bH]i`h]b[`hc`hY`Xnb`Ua`]WXY`Y`cda`Ybhc`Zdcdi`Uf`W`h`fY`H\]g`Wéi`fgY`k`]`Yi`d`cfY`5g]Ub`dcdi`Uf`W`h`fY`]b`U[`cVU`U`bX`Wé`cg!W`h`fU`Wé`bH]i`h`Z`YgdYWU`m]hg`fc`Y`]b`hY`dfcXi`W]cb`cZa`YUb]b[`UbX`Wé`bH]i`W]cb`cZ]Uf]ci`g`Zcfa`g`cZ]XYbH]m`Mci`k`]`Yi`Ua`]bY`a`i`g]Wé`Z]g\]cbž`6c`nk`ccXž`a`Ub[`Už`?!Dcdž`Zc`Xž`gdcf]gž`UbX`hY`Uf]g`]b`gdYWU`Z]WYh`bc[`fUd\]WgYH]b[`g`]b`fY`U]cb`hc`fXca`]bUbh]XYc`c[`mž`3[`YbXYfž`gYi`i`U`]mž`fUWž`UbX`gcWU`U`\]YfUfW`m`Mci`k`]`ZcW`g`cb`hY`]bH]WU`h`]bH]fY`U]cb`cZdck`Yf`UbX`dc`]h]Wé`ž`UbX`hY`k`Um]g`]b`k`\]W`dcdi`Uf`W`h`fYg`UfY`dfcXi`W`Xž`W]fW`UfY`Xž`a`Uf`Y`h`Xž`fUbgZcfa`YX`UbX`Wé`bgi`a`YX`VmX]Z]YfYbH]i`X]YbW]g`H\]g`Wéi`fgY`k`]`c`Z]f`U`W]h]WU`i`bXYf]g]bX]b[`cZ`W`h`fY`UbX`gc`Zidck`Yf`]b`5g]Ub`Wé`bH]i`h`Zcfa`W`h`fU`gh`X]Ygž`gcW]c`c[]WUž`Ub`h`fc`dc`c[]WU`U`bX`\]g]h]f]WU`dYfgdYW]j`Yg`

7 ci fgY`@YUfb]b[`Ci`hWé`a`Yg

%`5b`U`mgY`UbX`Yj`U`i`UfY`fY`Yj`UbhgVXc`Uf`m`]hY`fU`h`fY`]b`hY`gh`X]Yg`cZdcdi`Uf`W`h`fY`&`9j`U`i`UfY`gVXc`Uf`m`UddfcUW`Yg`hc`hY`gh`XmcZUb`5g]Ub`Wéi`b]f]m]c`f`fY[]cb`'`8Ya`cbg]fU`h`d`fY`d`UfY`X`d`Uf]h]W]d`U]cb`]b`ga`U`[`fci`d`k`cf`_`(``F`YZY`W]h]W]h]WU`m]cb`ck`b`_`bck`YX[`Y`cZ5g]Ub`G]h`X]Yg`)`" `A`U`_`Y`gVXc`Uf`m`Uf[`i`a`Yb]g`i`g]b[`]bXYdYbXYbhm`c`WU`h`X`UbX`W]YX]V`Y`Yj`]XYbW]

HYUW]b[`G]fU]h[]Yg`

H\]g`Wéi`fgY`]g`hU]i`[`h`k`]h`U`Wé`a`V]bU]cb`cZ]bH]fUW]j`Y`Y`W]h`fYgž`h`hc]U`g`UbX[`fci`d`!UgYX`UW]j`]h]Yg`" `H\Y`Y`W]h`fYg`dfc]`]XY`VUW`[`fci`bX`]bZcfa`U]cb`UbX`]b]f]cXi`W`h`Yc`fY]h]WU`UbX`UbU`m]h]WU`dYfgdYW]j`Yg`UbX`XYVU]h]g`h`U]h`UfY`Yi`d`cfYX`]b`cf`Yi`Ya`d`]Z]YX`Vm`hY`gdYWU`]gYX`k`YY`_`m]fYUX]b[`g`" `Mci`k`]`VY`YbWéi`fU[`YX`bchcb`m]hc`W]h]WU`m]Yb[`U[`Y`k`]h`hY`Y`W]h`fYg`UbX`dfc]`]XYX`fYUX]b[`gž`Vi`h`U`gc`hc`fYZY`W]cb`m]ci`f`ck`b`]j`YX`Yi`d`Yf]YbW]g`Ug`U`Wé`bgi`a`Yf`cZdcdi`Uf`W`h`fY`" `H\Y`k`YY`_`m]h`hc]U`d`fYgYbH]h]cb`]g`U`d`U]hZcfa`Zc`f`m]ci`hc`Wé`bH]i`h`Y`hc`hY`X]gW`gg]cbg`cb`fYUX]b[`gž`Wé`a`V]bYX`k`]h`hY`h`Yc`fY]h]WU`UbX`a`Y`h`c`Xc`c[]WU`UddfcUW`Yg`]b]f]cXi`W`X`]b`hY`Y`W]h`fYg`" `9b[`U[`Ya`Yb]k`]h`hY`Wéi`fgY`Wé`bH]bh]g`UggYggYX`Vm`Ub`YbX`!cZ]h]fa`h`Yg]h`9ggUm]UVg]fUW]h]UbX`Ubbch]hY`X`V]V`]c[`fUd`m]UfY`]a`dc`f]h]b]h]d]f]c`W]gg`hc`\`Y`d`m]ci`k`cf`_`hck`Uf`m]ci`f`fYgYUfW`Yg]gUm]cb`U`gdYW]Z]W]h]d]W`

5ggYgga Ybh

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
; fci d'dfYgYbH]cb`	&)	Bch5dd`]WUV`Y	%ž&ž ž)
9ggUmiUVghfUVWiUbX UbbchUH`X`V]V]c[fUd\mi	&)	% #/##&\$%- '\$, .\$\$`DA	%ž&ž)
F YgYUfW`YggUmi) \$	&- #/##&\$%- '\$, .\$\$`DA	%ž&ž(ž)

5ggYgga Ybh8YH]`g

5ggYgga Ybh% ; fci d'dfYgYbH]cb

GHUfhXUH. Bch5dd`]WUV`Y

@Yb[h. '&\$!'&) 'a]bi Hg

8YH]`g. Gh XYbhg dGh XYbh d'fUy]b hgc bYUX]6 [Ug] bYX]K Ugg] [hYX]gWYg. hY Wc fy`Uf[i a %o h %ž hY
fYUX]b[gžUbX`Y %o

		%&: fci d'DfYgYbHhcb &F YdfYgYbHhcb'UbX'W&bgi a dhcb'cZ9h.b]W A]bcf]hYg]b'dcddi 'Uf'7i 'hi fY'fHbX]U'UbX'7\]bU&
K YY_ ; ('Bcj Ya VYf! ; Bcj Ya VYf	@YWhi fY	=g'Ua]WDcd'7i 'hi fY
	Hi hcf]U'	%&: fci d'DfYgYbHhcb &L'g'Ua]WDcd'7i 'hi fY]b'&XcbYg]U'UbX'A U'Umg]U
K YY_- . %%Bcj Ya VYf! %) 'Bcj Ya VYf	@YWhi fY	A i g]W]b'5g]U. '<U`mi 'UbX'Dcddi 'Uf'A YX]U]b Gci h\YUgh5g]U . .
	Hi hcf]U'	%&: fci d'DfYgYbHhcb &L'8]gW gg]cbg <ul style="list-style-type: none"> • H\Y'YI dcfhUbX']a dcfhcZ? cfYUb'W 'hi fY]b 5g]Ub'fY[]cbg'UbX'VYm&bX • 7cga cdc']hUb]ga]b'Dcddi 'Uf'A YX]U]b Gci h\YUgh5g]U
K YY_ %\$. % 'Bcj Ya VYf! && Bcj Ya VYf	@YWhi fY	5g]Ub'dcddi 'Uf'W 'hi fY]b'5i ghfU']U—U'fYZYW]cb
	Hi hcf]U'	%&: fci d'DfYgYbHhcb &L'8]gW gg]cb. 'Dcd'W 'hi fY'UbX'bU]cbU']XYb]h]m/ H\Y'UWY'df]bVW'UbX'fY'YW]cb'cZ5g]Ub'dcd'W 'hi fY]b'5i ghfU']U

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

7ci fgY`fYUX]b[g`UfY`Uj U]UV`Y`cb`A ccX`Y

F YWca a YbXYX`F Ygci fWg

F YWca a YbXYX`fYgci fWg`UbX`ch\Yf`fY`Yj Ubha Uhf]U`g`UfY`Uj U]UV`Y`cb`A ccX`Y

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

H\]g`Wci fgY`]g`Zcfa U`mYj U`i UhYX`h\fc [\`A m9I dYf]YbWf

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

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

Ẓmci `YbWci bhYf`U`dfcV`Ya `k \Yb`U`H`Ya dh]b[`hc`gi Va]hmc`i f`Ugg][ba YbhHfci [\`Hi fb]h]bžd`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`mYUfL` Ẓmci
UfY`i bUV`Y`hc`gi Va]hmc`i f`Ugg][ba YbhXi Y`hc`U`ZU`i`hik]H`Hi fb]h]b`mci `a UmiUdd`miZc`f`Ub`YI H`bg]cbžVi hmc`i
a i ghfYH]b`mci f`h]W`Yhbi a VYf`Zca `9I H`fbU`Gi ddcfhfU`cb[`k]H`Ubmch`Yf`fY`Yj UbhXcW a YbHgE`hc
]bWi XY`Ug`Yj]XYbW`hc`gi ddcfhmci f`YI H`bg]cb`Udd`]W]h]cb" Ẓmci `Ya U]`9I H`fbU`Gi ddcfhmci `k]`

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[YgžUfhUbX`XYg][b`dfc`YWgžUg`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`Ub[]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 bXYfghUjX'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'UjX'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc'W'h
- VY'Uk UfY'cZ'Y'ghUjX'UfX'g'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmc'bY'j'b'h'Y'I BGK 'W'a a i b]m
- 'cW'U'Y'gY'fj]W'g'UbX'j'bZ'c'fa U'h'c'b'UV'ci hi BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k]'VY'ZJa]]Uf'hc'mci ž'c'h'Y'fg'k]'VY'bYk "; U]b]b['U'gc'X'i bXYfghUjX]b['cZU''h'Y fY'U'Y'X'UgdY'W'g'cZ9@G9'k]''\Y'd'mci 'a U_Y'h'Y'a cgh'cZ'mci f'gh X]Yg'Uhl BGK ""

[\h'c'.#g'i V'Y'W'i \]X'Y'g"\]VfUfm'i bgk "Y'X'i "U'i #' \]g'Y'#U'V'ci h' \]g'Y](#)

5 WUXYa]WbZcfa Uh]cb`

: cfYggYbh]U`gh XYbh]bZcfa Uh]cb`fY`Uh]b[`rc.

- fYei Ygh]Zc`fYI hYbg]cb/

