



ARTS1241

9bj]fcba YbHJ`5Xj cWUWmUbX`5Wlj]ga

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

7ci fgY`Cj Yfj JYk

`GHUZZ7cbhUWhi8YHUJ`g`

`7cbj Ybcfg`

B Ua Y	9a Uj`	5j Uj`UVj]jm	@cWUhcjb	D\cbY
8f`@Ui fU A W@Ui W`Ub	`Ui fU"a WUi W`Ub4 i bgk "YXi "Ui	H\i fgXUm!'	A cfj Yb`6fck b fccca `&*-	W`bUWhj]U Ya Uj`d`YUgY

`Hi hcfg`

B Ua Y	9a Uj`	5j Uj`UVj]jm	@cWUhcjb	D\cbY
HUmcf`7cmbY	hUmcf"WcmbY4 i bgk "YXi "Ui			
Hca `K]W_Yfh	h`k]W_Yfh4 i bgk "YXi "Ui			

GWXcc`7cbhUWhi`bZcfa Uhjcb

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

@cWUhcjb. `GWXcc`C Z]WzA cfj Yb`6fck b`6i]X]b[ž@Yj Y`&z&),

CdYb]b[`<ci fg.`A cbXUm!`: f]XUmž`- Ua `!`) da

D\cbY. `ž*%&`-' ,) `%*, %

: U! . ž*%&`-' ,) `; , +\$)

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

7ci fgY'8YHJ]`g

7fYX]h'Dc]bhg`*`

Gi a a UfmcZh\Y'7ci fgY

5ggYgga Ybh

Gh XYbfg'k]''VY'gi ddcfHYX']b'XYj Y'cd]b['hY]f'Ugg][ba Ybhg'h'fci [\ 'cb']bY'UWij]hYg'fk \]M'k]''VY X]gW'ggYX']b''YWh' fYg'UbX#cf'h' hc'f]U'gk''

5ggYgga YbhHUg_g'

5ggYgga YbhHUg_	K Y][\ h	8i Y'8UH'	Gh XYbh@YUfb]b[Ci hW'a Yg'5ggYggYX
6`c[']	&)	\$, #/\$#&\$%- '\$) .\$\$'DA	%ž&ž
; fci d'9h'bc[fUd\]WGh Xm	')	\$) #/0#&\$%- '\$) .\$\$'DA	%ž&ž ž(
ᄁX]j]Xi U'7 UgY'Gh Xm	(\$	\$' #/0#&\$%- '\$) .\$\$'DA	%ž&ž ž(ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% '6`c[

GHUfhXUH'. 'Bch5dd`]WV'Y

8YHU]`g. 'Gh XYbfg'k]''UbU'mgY'Ub]bgh'UbW'cZYbj]fcb'a YbhU'UWij]ga 'cf'UX] cWUWm'UbX'k f]h'cbY'V'c[Yb'fmcZ+) '\$'k cfXg''H\Ymk]''VY'fYei]fYX'hc]XYbh]Zm'UbX'UbU'mgY'h'Y'h'Ycfm'f'f'h'Ycf]Yg'c'ZWX'Ub[Y'VY]b[i gYX'Vm'h'Y'UWij]gh'g#UX] cWU'g']bj c'j YX''Gh XYbfg'k]''i g'Y'h'c' _YmW'ci fgY'fYUX]b[g'hc'Ugg]gh'h'Y]f'UbU'mg]g'H'Y'Ugg][ba Ybh'gi Va]gg]cbg'k]''fYW']Y'k f]h'Y'b'ZYXVUW_]b'UW'cfX'UbW'k]h'h'Y'a'Uf_]b[fi V'f]W

5ggYgga Ybh&. ; fci d'9h'bc[fUd\]WGh Xm

GHUfhXUH'. 'Bch5dd`]WV'Y

8YHU]`g. 'ᄁ'[fci dgž'gh XYbfg'k]''Udd'm'Udd'f'c'f]UH'Y'W'cbW'dhg'UbX'UbU'm]W']h'Y'W'b]ei Yg'hc'k f]h'U'[fci d &\$\$!k cfX'UbU'mg]g'cZU'dUfh]W'Uf'c'W']bgh'UbW'cZYbj]fcb'a YbhU'UWij]ga "K f]h'Y'b'ZYXVUW_]cb Ugg][ba Ybh'k]''VY'dfcj]YX']b'UW'cfX'UbW'k]h'h'Y'UggYgga Ybh'fi V'f]W

5ggYgga Ybh' . ᄁX]j]Xi U'7 UgY'Gh Xm

GHUfhXUH'. 'Bch5dd`]WV'Y

8YHU]`g. 'ᄁX]j]Xi U'%) \$\$!k cfX'Ugg][ba Ybh'i]g]b['UbU'm]W']Udd'f'c'UW'Yg']b'f'c'Xi W'X'h'fci [\ 'ci h'h'Y'W'ci fgYž'gh XYbfg'k]'']bX]j]Xi U'm'gY'YWh'UbX'UbU']gY'U'WUgY'gh XmcZYbj]fcb'a YbhU'UWij]ga 'cf'UX] cWUWm'K f]h'Y'b'ZYXVUW_]j'U'Hi'fb]h'b"

C b`]bY`5Wj]]hm

GY`ZfY`ZVW]cb`UbX`WJFY.`7 cbg]XYf]b[`mci f`d`UWY`]b
h\Y`YWc`c[mcZVXUb[Y

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

Gh XYbfg`UfY`fYei`]fYX`hc`fYUX`U`cZ`h`Y`dfYgWf]VYX`fYUX]b[`g`YUW`k`YY`_`Ug`dfYdUfU]cb`Zc`f`YW`h`fY`UbX`
h`hc`f]U`X]gW`gg]cbg"``H`Y`g`Y`fYUX]b[`g`UfY`U`gc`gW]Zc`XYX`hc`Y`Y`d`mci`k`]h`mci`f`Ugg][`ba`Ybfg"

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

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

≠mci`YbWci bHYf`U`dfcV`Ya`k`Yb`U`HYa`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]h]b`z`d`YUgY`
HY`Yd`cbY`9I`HYfbU`Gi`ddcfhcb`-`,`)`''`'`%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`fI`*)`XUmg`U`mY`UfL`≠mci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhXi`Y`hc`U`ZU`ihk`]h`Hi`fb]h]b`mci`a`Um`Udd`mi`Zc`f`Ub`YI`HYbg]cb`z`Vi`hmc`i`
a`i`ghfY`hU]b`mci`f`h]W`Yhbi`a`VYf`Zca`9I`HYfbU`Gi`ddcfhfU`cb[`k`]h`Ubmc`h`Yf`fY`Yj`UbhXcW`a`Yb`hg`L`hc`
]bWi`XY`Ug`Yj`]XYbW`hc`gi`ddcfhmc`i`f`YI`HYbg]cb`Udd`]W]h]cb"≠mci`Ya`U]`9I`HYfbU`Gi`ddcfhmc`i`k`]"`

5 WUXYa]W<c bYghmiUbX`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 gZ`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[YgZ`UfhUbX`XYg][b`dfc`YWgZ`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`Ub[]b[`U`ZYk `k cfXg`UbX`d`fUgYg`k \]Y`a cghmiFYhU]b]b[`hY`cf][]bU`
ghfi W`i fY`UbX`#`f`dfc[fYgg]cb`cZ]XYUg`cZ`hY`cf][]bU`Z`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`Yz`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`XUHY`Zc`f`Zc`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'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmcby`]b'h'Y'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj]W'g'UbX']bZ'fa U]cb'UVci hl 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 bXYfghUbx]b['cZU''h'Y fY'U'Y'X'UgdY'W'g'cZ9@-G9'k]''\Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\h'hd.##ji V'Y'W'i \]X'Y'g" \]V'f'U'f'm'i b'gk "Y'X'i "U'i #' \]g'Y'#J'V'c'i h' \]g'Y](#)

