



ARTS2035

5a Yf]WUb`@]hYfUhi fY. `DUgh'UbX`DfYgYbh

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

7 ci fgY`Cj Yfj]Yk

`GHUZZ`7 cbhUW`i8YHU]`g`

`7 cbj Ybcfg`

B Ua Y	9a U]`	5j U]`UV]`]m	@cW]h]cb	D\cbY
G][]`>ch_UbXh	g"ch_UbXh4 i bgk "YXi "Ui	H\i fgXUm]` !(K YVghYf' %%>	\$&- ' ,) * , %

`Hi hcfg`

B Ua Y	9a U]`	5j U]`UV]`]m	@cW]h]cb	D\cbY
HUa `nb`5j Yfm	hUa `nb"Uj Yfm4 i bgk "YXi "Ui			

GWXcc`7 cbhUW`i`bZcfa Uh]cb

Fcca " %&Z`Yj Y`" `F cVYfhK YVghYf`6i]X]b[

D\cbY. f\$&L'- ' ,) '(,) *

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

K YVg]hY. [\hfdg.#gUa "Ufmg"i bgk "YXi "Ui](#)

H\Y`GWXcc`cZ`hY`5fmg`UbX`A`YX]U`k`ci`X`_]Y`hc`F`YgdYWZ`m5W_bck`YX[`Y`h`Y`HfUX]h]cbU`7`i`ghcX]UbgZ`h`Y`6YXY[`U`f`P`Ybg]b[`hcb`W]a`di`glZ`;`UX][`U`f7`]mUbX`5fhi`8Yg][`b`7`Ua`di`gYgk`UbX`h`Y`B`[`i`bbUk`U`dYcd`Y`f5i`ghU]Ub`8YZbWV`:`cfW`5WUXYa`m]b`7`UbVYffUk`cZ`hY`UbXg`k`YfY`YUW`W]a`di`g`cZi`BGK`]g`c`W]hY`X"

• gYY_g'hc []j Y'Yj Yfmghi XYbhU'ghU_Y]bžUbX'Ub'cddcfh b]mhc'Wčbf]Vi H'hcžhY'Wči fgY'Ug'U'Zcfi a
gWfh'UbZf]Yf]b["

@YWh fYgžh hcf]U'g'UbX'UggYgga Ybh]b'h]g'Wči fgY'g\ci `X'[]j Y'mci 'hY'g_]`g'bYVWggUfmihc'dYfZcfa
]bh`][Ybž]bXYdYbXYbhfYUX]b[g'cZ5a Yf]WUb`]YfUfmiHl hg'UbX'hc'Wča a Y'gi fghfYUX]b[h]c`][Yfa

5ggYgga Ybh

K Y'Zj ci f'hY'7\]WJ[c'A Ubi U'cZGmYž%+h'YX]hcbžZcf'U'ghmY'UbX'fYZfYbW]b['a UHf'g"

[\hd.##k k k "WX\]WJ\[ca Ubi U'cZgmY"cf\[#cc'gSW\]hcb\[i \]XY#W\]hcb\[i \]XY!%"ha`](#)

K Y'U'gc''_Y'hc'gYY'U'ghfcb['j]bXYdYbXYbhj c]W']b'U''k f]hYb'hUg_g":]bX'WcbZ]XYbW']b'mci f'ck b'j]Yk g UbX'↑ X[Ya Ybhgžk \]Y'hYgh]b['hYa 'U[U]bgh'hY']XYUg'cZchYf'W]h]Wg'UbX'h]i b_Yfg"

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWca Yg'5ggYggYX
9I Ua `	(\$	&- #/%#&,\$%- '\$) .\$\$`DA	%ž&ž ž(ž)
A]bcf'K f]h]b['5gg][ba Ybh	%	&&#/%#&,\$%- '\$) .\$\$`DA	%ž&ž ž(
F YgYUfW'9ggUm	()	&#/%#&,\$%- '\$) .\$\$`DA	%ž&ž ž(ž)

5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`9I Ua

GHUfhXUH. `Bch5dd`]WV`Y

8YHJ]`g. `HU_Y!\ca Y`YI Ua]bU]hcb'gYh]b'hY'Zcfa U`YI Ua]bU]hcb'dYf]cX" H\Y`YI Ua `k]`Wcbg]ghcZlk c`Yei U`dUf]g'cj Yf'hY`Yei]j U`YbhcZlk c`ci fg" H\]g']g'hY`Z]bU`UggYgga YbhHUg_"6f]Yzk f]hYb`Wca a Ybhg UbX'a Uf_g\YYh[f]X'k]h`W]hYf]U'dfcj]XYX"

Hi fb]h]b'gYH]b[. H\]g'Ugg][ba Ybh]g'gi Va]hYX'hfci [\`Hi fb]h]b'UbX'gh XYbhg'Xc`bchgYY`Hi fb]h]b]g]a]Uf]hmfYdcf]g"

5ggYgga Ybh&`A]bcf'K f]h]b['5gg][ba Ybh

GHUfhXUH. `Bch5dd`]WV`Y

@Yb[h. `\$\$\$

8YHJ]`g. `\$\$\$\$`k cfXg'6f]Yzk f]hYb`Wca a Ybhg'UbX'a Uf_g\YYh[f]X'k]h`W]hYf]U'dfcj]XYX"

Gi Va]gg]cb`bchYg.@cc_]b[`Zcf'5a Yf]W]`WUgg'dfc`YWh

Hi fb]h]b'gYH]b[. H\]g']g'bchU`Hi fb]h]b`Ugg][ba Ybh

5ggYgga Ybh' . `F YgYUfW'9ggUm

GHUfhXUH. `Bch5dd`]WV`Y

@Yb[h. `&) \$\$

8YHJ`g. '&) \$\$'k cfXg" 'K f]mYb`Wca a Ybhg`UbX`a Uf_g\YYh[f]X`k]h`W]hYf]U`dfcj]XYX"

Hi fb]h]b`gYh]b[. 'H\]g`Ugg][ba Ybh]g`gi Va]mYX`h`fci [\ `Hi fb]h]b`UbX`gh XYbhg`Xc`bchgYY`Hi fb]h]b`g]a]Uf]mYdfc]h]"

K YY_%.% 'Bcj Ya VYf!	@YWi fy	7 `Ui X]U'F Ub_]bYž5 [f] W , 3` 3_ Wd[US` >kd[U f&\$%(1
&&'Bcj Ya VYf	Hi hc]U'	F Ub_]bYž5 [f] W

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

Gca Y`cZkYgY`k]`VY`Zci bX`cb`hY`Wci fgY`A ccX`Y`g]hY`"H\Y`fYghUfY`Uj U]`UV`Y`hfc[\ `hY`Vcc_ghcFY"

Hfi a Ub`7 UdchYž;` 5a`V`4`aaV`f%-`**`Ł
9a]m8]W_]bgcbžgY`YWYX`dcYa g`A ccX`YQ
: fYXYf]W_`8ci [`Uggž`@SdSf]hWaXfZW>[XWaX8dW]U]`6agY`Seel S` 3_`Wd[US` E`ShW`I` dffW` Tk : [_eWX
f%` ()`Ł`A ccX`YQ
5`Yb;`]bgVi f[ž`<ck` ``f%-`)`*`Ł`A ccX`YQ`UbX`@Ub[i U[Y`dcYfmržgY`YWYX`dcYa g`A ccX`YQ
B`U`h`Ub]Y`<`Uk`h`c`fb`Y`ž`F`Z`W`E`U`S`d`W`f`>`W`f`W`d`f`%`)`\$`Ł
F`U`V`X`Y`?`i`g`b`Y`f`ž`F`Z`W`8`S`_`W`f`Z`d`a`i` W`b`f`&`\$`%` Ł`
<`Y`f`a` Ub`A` Y`j`]`Y`ž`6`U`f`h`Y`V`m`h`Y`G`W`f`j` Y`b`Y`f`ž`6`Y`b`]`h`c`7`Y`f`Y`b`c`f`%`)`*`Ł
7`Ui`X`]`U`F`Ub_]`b`Y`ž`5`[f]`W`f`&`\$`%(`Ł`
9`X`]`h`K` \`U`f`h`c`b`ž`F`Z`W`3`Y`W`a`X;` ``a`U`W`U`W`f`%-`&`\$`Ł
K`U`h`K` \`]`a` Ub`ž`>`V`S`h`W`e`a`X`9`d`S`e`g`f`%`)`)`Ł`A ccX`YQ

F YWca a YbXYX`F Ygci fWg

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

K`Y`f`Y`[`i`U`f`m`f`Y`]`g`Y`Ub`X`i`d`X`U`h`Y`h`]`g`W`ci` fgY`ž`d`U`f`h`m`]`b`f`Y`g`d`c`b`g`Y`h`c`g`h`i`X`Y`b`h`ž`Y`X`V`U`W`_`Ub`X`W`b`h`f`]`Vi`h`j`c`b`g`"
D`Y`U`g`Y`ž`Y`ž`Y`Y`h`c`a`U`_`Y`g`i` [[`Y`g`h`c`b`g`h`c`h`Y`W`ci` fgY`Ui`h`c`f`]`m`f`

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`m`YUfL` 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 YbHgk`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 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 gžZca 'XY`]VYfUh'`WXYUh]b['h'UWVXYbhU`miW'cdm]b['Zca 'U'gci fW'k]h'ci hUW_bck `YX[Ya Ybh'

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

7cdm]b[.i g]b['hY`gUa Y'cf'j Yfmg]a]Uf'k cfXg'h' hY'cf][]bU`hI hcf']XYU'k]h'ci hUW_bck `YX[]b['hY

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5Ww'dhUV'Y'I gY'cZ
I BGK '⇒H'F Ygci fW'g'Dc`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dYW'X'cZYj Yfmcby'jb'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj]Wg'UbX'jbZcfa Uh'cb'UVci hl BGK 'UbX'I BGK '@VfUfm

Gca Y'cZh'YgY'UfYUg'k]`VY'ZJa]]Uf'hc'mci ž'ch'Yfg'k]`VY'byk "; U]b]b['U'gc`X'i bXYfghUbx]b['cZU`h'Y
fY'UH'X'UgdYW'g'cZ9@G9'k]`Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hhd.##ji V'YWf'i \]XYg" \]VfUfm'i bgk "YXi "Ui #' \]gY#JVci h' \]gY](#)

5 WUXYa]WbZcfa Uhcb`

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

- fYei Yghg`ZcfYI hYbg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I B GK `<YU`h`UbX`GUZY`midc`]WYg/
- YI Ua]bUh]cb`dfcVWXi fYg/
- gdYWU`Vcbg]XYfUh]cb`]b`hY`Yj Ybhcz]`bYgg`cf`a]gUXj Ybh fY/
- ghi XYbhYei]mUbX`X]gUV`]m/
- UbX`chYfYggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\hfg.#k k k "Ufng"i bkg "YXi "Ui #W ffYbhghi XYbh\]bZcfa Uhcb`dfcVcb`g`\[i \]XY`\]bYg#](#)

⇒ U[Y`7 fYX]h

[H\]hY`\]a U\[Y.`@\]VYfmVmJ \]UbYnz`hY`WYUrcf`cZhY`7cc`UfhA cj Ya YbhVUgYX`\]b`BYk`Mcf`7\]m`](#)

H\Y`]a U[Y`Z]Y`]g`]WbgYX`i bXYf`hY`[7 fYUh\] Y`7ca a cbg`5hf\]Vi hcb!G\UfY`5`\] Y`\("\\$`bhYfbUh\]cbU`"\]WbgY"](#)

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7cXY.`\$\$\$- , ;