



ARTS2452

7 \]bYgY '9b[`]g\ `HfUbg`Uh]cb

HYfa `Cby`#`&\$&%

7ci fgY`Cj Yfj]Yk

GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]UV]]m	@cW]hcb	D\cbY
8f`M]b[]`Gi b	m]b[]`gi b4 i bgk "YXi "Ui	VmUddc]bha Ybh	A cfj Yb`6fck b &)	- ' ,) &* (\$

@YW]i fYfg

B Ua Y	9a U]	5j U]UV]]m	@cW]hcb	D\cbY
8f`M]b[]`Gi b	m]b[]`gi b4 i bgk "YXi "Ui	cb]bY`Wcbgi`h]hcb Uh' !(da`A cbXUmcf VmUddc]bha Ybh	A cfj Yb`6fck b &)	- ' ,) &* (\$

GWXcc``7cbHJW]`Zcfa U]hcb

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

@cW]i` b

5ggYgga Ybh

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
HfUbg`Uh]cb`9I YfW]gYg`UbX E i]nnYg`	(\$i	; fci d`hfUbg`Uh]cb`YI YfW]gYg]b`k YY_` / `) `h hcf]U`g/`#! WUgg`ei]nnYg`]b`k YY_`&Z` (`Z+ / ` - `YVh` fYg`	' ž(
HYgh`	(\$i	A]X!hYfa `HYgh]b`k YY_`) `YVh` fY`f%) #` \$`#&\$%&`/;]bU` HYgh]b`k YY_`%\$`YVh` fY f%- #\$(#&\$%&`	' ž(
F YgYUfW `Dfc`YVh`	&\$i	Gc`c`W]h]WU`fYj]Yk `Xi Y`]b k YY_`%\$/DU]f# fci d dfYgYbhU]cb`Xi Y`]b`k YY_`%\$ h hcf]U`	%ž&

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`HfUbg`Uh]cb`9I YfW]gYg`UbX E i]nnYg

8YHU]`g.

Gh XYbh]Wta d`Yh`&[fci d`hfUbg`Uh]cb`YI YfW]gYg`f&\$i` E`UbX`(`]b!WUgg`ei]nnYg`f&\$i` E`@Yb[h. [fci d`hfUbg`Uh]cb`YI YfW]gYg. `WU`*`\$`a`]bg/`ei]nnYg. `WU`%)`a`]bi`hYg`YUW`"

: YYXVUW`_`cb`[fci d`hfUbg`Uh]cb`YI YfW]gYg`j]U`k`f]hYb`cf`c`fU`ZYXVUW`_`hc`[fci d`ZYXVUW`_`cb`g`l`cf`hei]nnYg`j]U`]b!WUgg`X]gW`gg]cb`"

5ggYgga Ybh&`HYgh`

8YHU]`g.

Gh XYbh]k]`Wta d`Yh`U`&!`ci`f`cb`[`a`]X!hYfa`hYghf&\$i` E`UbX`U`Z]bU`hYghcZ`&!`ci`fg`f&\$i` E`

: YYXVUW`_`cb`a`]X!hYfa`hYghj]U`]bX]j]Xi U`Wta`a`Ybh`Gh XYbh]k]`fYW]j Y`U`a`Uf`_`Zc`f`h`Y`Z]bU`hYghUbX`W]b`Wcbgi`h`h`Y`YVh`fYf`Zc`f`Z`f`h`Yf`ZYXVUW`_`"

5ggYgga Ybh` .`F YgYUfW `Dfc`YVh`

8YHU]`g.

Gh XYbh]Wta d`Yh`U`gc`c`W]h]WU`fYj]Yk`fUddfci`"``%`\$\$`9b`[]g`l`k`cfXg`cf`&`\$\$`7`\\]bYg`Y`W`UfUW`fYg`E`C`F`U`dU]f#`fci`d`dfYgYbhU]cb`fWU`(`a`]bi`hYg`dYf`dYfgcb`E`"

: YYXVUW_j]U`]bX]j]Xi U`Wta a Ybng`cf`]b!WUgg`X]gW`gg]cb"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

5`fYUX]b[`a Uhf]U`g`UfY`Uj U]UV`Y`]b`A ccX`Y"

F YWca a YbXYX`F Ygci fWg

6cc_g

A U`a _`A fž?]fghYb/K]bX`Yž? Yj]bžFZWA j XadV : S` VTaa] aXfdS` e`Sf[a` E fgV[MežCI Zcfx`I b]j Yfg]m
DfYggž&\$\$%"`f9Vcc_`Uj U]UV`Y`Uhl` BGK ``]VfUfnt

A]`bž7 Ufa Yb`YX""`FZWDagf`WYWZS` VTaa] aXfdS` e`Sf[a` efgV[Mež<cVc_Yb.`HUmcf`UbX` : fUbW]gž&\$\$% "
f9Vcc_`Uj U]UV`Y`Uhl` BGK ``]VfUfnt

A i bXUmž>YfYa m` :` fdaVgU[` Y fdS` e`Sf[a` efgV[Me, fZWad[Me S` V Sbb [USf[a` ež: ci fh`YX]h]cb`žCI Zcfx` :
HUmcf`/` : fUbW]gž&\$\$%"`f9Vcc_`Uj U]UV`Y`Uhl` BGK ``]VfUfnt

Dc`UfXž8Uj]X/7`UbžG]b!k U]`3` W UkU`abSW[S aXfdS` e`Sf[a` , 5Z[` WeWž7` Y`eZt 7` Y`eZž5Z[` WeW`%gh
dUdYfVUW`YX"ž<cb[`? cb[.`7`bYgY`I b]j Yfg]mDfYggž&\$\$%"

F cV]bgcbž8ci [`Ug" 4WJa_ [`Y S fdS` e`Sfad S` [fdaVgUf[a` fa fZWfZWadk S` V bdsUf[UWaXfdS` e`Sf[a` ž' fx
YX"žA]hcb`DUf_ž5V]b[XcbžCI cb/BYk`Mcf_` : F ci hYX[Yž&\$\$%"`f9Vcc_`Uj U]UV`Y`Uhl` BGK ``]VfUfnt

7`Ybž<cb[k Y]ž: S` K[`Y XS` k[`U Zg` :` 9ggYbh]U`hfUbg`Uh]cb`Zca`7`bYgY`]bfc`9b[`]g\ž
G\Ub[\U].`G\Ub[\U]k U]m`]Uc`m` WXi`VUb`g\Y :` ž%- , "

; i cžN\i n\Ub[/@žE]b[g\Yb[""K[`Y : S` Zg k[eZ[ka` Y \Sa UZW Y , j [g V[`Y TW :
`5`dfUW]WU`Wci fgY`]b`hfUbg`Uh]cb`VYtk`YYb`9b[`]g\`UbX`7`bYgYžK i WXUb[` : K i \Ub`XU`I i Y`WXi
VUb`g\Y/ :` ž%- - *

>ci fbUg.

? WfS, FdS` e`Sfaderi <agd S? WfS, FdS` e`Sfaderi <agd S^

F SdYwf, ;` fWd Sf[a` S^<agd S^aXfdS` e`Sf[a` E fgV[Me

5Z[` WeWFdS` e`Sfaderi <agd S^

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

H\]g`Wci fgY`k]`VY`Zcfa U`mYj U`i UHYX`h]fci [`A m9i dYf]YbW"

Gi Va]gg]cb`cZ5ggYgga YbhiHUg_g

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

Ʒmci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UH`Ya` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`h`fci`[`\`Hi`fb]h]b`z`d`Y`UgY`
HY`Yd`l`cb`Y`9I`HY`fb`U`Gi`ddc`fh`cb`-`,`)`"``"``%`cf`Ya`U]`h`Ya`i`cb`YI`HY`fb`U`HY`hgi`ddc`fh`4`i`bgk`"YXi`"Ui`"Gi`ddc`fh`
l`ci`fg`UfY`,`.\$`\$Ua`-`-%`\$.\$`\$da`i`cb`k`YY`_X`Umg`U`bX`-`.\$`\$Ua`-`).`.\$`\$da`i`cb`k`YY`_Y`bX`g`f`l`*)`X`Umg`U`m`Y`U`f`l`"Ʒmci`
UfY`i`b`UV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`Xi`Y`hc`U`Z`Ji`h`k`]h`Hi`fb]h]b`mci`a`Um`Udd`m`Z`f`U`b`YI`HY`bg]cb`z`Vi`hmc`i`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`hbi`a`VY`f`Z`ca`9I`HY`fb`U`Gi`ddc`fh`f`U`cb[`k`]h`U`b`m`c`h`Y`f`f`Y`Y`U`b`h`X`c`W`a`Y`b`h`g`k`h`c`
]b`Wi`XY`U`g`Y`j`]X`Y`b`W`hc`gi`ddc`fh`mci`f`YI`HY`bg]cb`Udd`]W`h]cb"Ʒmci`Ya`U]`9I`HY`fb`U`Gi`ddc`fh`mci`k`]`
Ui`h`ca`U`h]W`m`f`Y`W`j`Y`U`h]W`Y`hbi`a`VY`f`z`Vi`h]Z`mci`HY`Yd`l`cb`Y`mci`k`]`b`Y`Y`X`hc`gd`Y`W`Z`W`m`U`g`_`Z`f`c`b`Y`"
Hi`fb]h]b`U`gc`d`fc`j`]X`Y`g`i`d`X`U`h`Y`g`c`b`h`Y`]f`g`m`g`h`Y`a`i`g`h`U`h`g`c`b`H`k`]h`Y`f`"

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

:`c`f`]b`Z`c`fa`U`h]c`b`c`b`l`c`k`hc`gi`Va`]h`U`gg][`ba`Y`b`h`i`c`b`]b`Y`j`]U`A`cc`X`Y`.\`h`d`g`#`g`h`X`Y`b`h`i`bgk`"YXi`"Ui`#`c`k`!
gi`Va`]h`U`gg][`ba`Y`b`h`i`a`cc`X`Y`"

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

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[`h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`_`Y`a` `U`b`m`
Z`c`f`a` g`z`Z`c`a` `X`Y`]V`Y`f`U`h`Y` `W`X`Y`U`h]b[`h`c` `U`W`W`Y`X`Y`b`h`U` `m`i`W`c`d`m]b[`Z`c`a` `U`g`c`i`f`W` `k`]h`c`i` h`U`W`_`b`c`k` `Y`X[`Y`a` `Y`b`h`

I`B`G`K` `[`f`c`i`d`g`d`U[]Uf]ga `]b`h`c` `h`Y` `Z`c` `c`k`]b[`W`U`h`Y`[`c`f`]Y`g.

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]]hYg'Ug'U'gh XYbhUhl BGK
-

5 WUXYa]W=Zcfa Uh]cb

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

- fYei Ygth]Zcf`YI H`bg]cb/
- `Uh`gi Va]gg]cbg[[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`mdc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
-