

# **SOCW2100**

5Vcf][]bU`DYcd`Y`UbX`GcWJU`K cf\_

HYfa "C bY" ## "&\$&\$

# 7ci fgY<sup>-</sup>Cj Yfj ]Yk

# <sup>'</sup>GhJZ'7cbhJWh'8YhJ]`g'

### '7cbj Ybcfg'

B Ua Y	9a U]`	5j U]`UV]`]hm	@cWUh]cb	D\cbY
A UfYY'<][[]bg	a "\][ [ ]bg4 i bgk "YXi "Ui		A cfj Yb 6fck b %),	\$&'-',) &'*)
>Ybb]ZYf GHYd\YbgYb	^ghYd\Ybgcb4 i bgk "YXi "Ui	-		D`YUgY WcbHJWhj]U YaU]`

### 'Hi hcfg'

B Ua Y	9a U]`	5j U]`UV]`] <b>m</b>	@cWUh]cb	D∖cbY
AY[Ub'9gWch	a "YgWchh4 i bgk "YXi "Ui	6m5ddc]bha Ybh	A cfj Yb 6fck b %* +	D`YUgY WcbHUWiVm Ya U]`
BY``]Y`Dc``UfX! K\Ufficb	b"dc``UfX!k\Uffcb4 i bgk "YXi "Ui	6mUddc]bha Ybh	A cfj Yb 6fck b %* +	D`YUgY WcbHUWiVm Ya U]`
D\]``]dU`9j Ubg	d"Yj Ubg4 i bgk "YXi "Ui	6mUddc]bha Ybh	A cfj Yb <sup>*</sup> 6fck b ‰)	Ž*%'&'-',) ,%,-
9a a U'GYUfY	Y"gYUfY4 i bgk "YXi "Ui	6mUddc]bha Ybh	A cfj Yb 6fck b %* +	D`YUgY WcbHUWiVm Ya U]`
?]Y`` <ybbyggym< td=""><td>n' \$-,,)\$4 i bgk "YXi "Ui</td><td>6mUddc]bha Ybh</td><td>A cfj Yb 6fck b %* +</td><td>D`YUgY WcbHUWiVm Ya U]`</td></ybbyggym<>	n' \$-,,)\$4 i bgk "YXi "Ui	6mUddc]bha Ybh	A cfj Yb 6fck b %* +	D`YUgY WcbHUWiVm Ya U]`

## GWXcc`7cbHJWhi±bZcfa Uhjcb

GWXcc``cZGcWJU``GWJYbWYg

Fcca '%) -

A cfj Yb 6fck b 7 &\$

Ya U]`. 'gcgg4 i bgk "YXi "Ui

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

7 ci fgY 8 YHJ]`g 7 fYX]hDc]bhg \*\* Gi a a UfmcZh\Y 7 ci fgY

GiVYWh5fYU.EaU[S^I ad]

# 5ggYgga Ybh

#### 7 'Uga'DUfhWdUhcb

Ghi XYbhgʻUfYʻYl dYWhYXʻhcʻh\ci [\hi `mubXʻUWhj Y`miYb[U[Y`k]h\ h\Y`Wci fgYʻWcbhYbhžʻUbXʻh\Y]fʻck b k cfʻXj]Yk gʻUbXʻdYfWdhjcbgʻ]bʻfY`Uhjcbʻhcʻh\YʻWci fgY"ʻHcʻUgg]ghih\]gžighi XYbhgʻg\ci `X`Wca YʻdfYdUfYXʻhc YUW\ hi hcf]U``k]h\`Uʻei Yghjcbž'Wca a YbhcfʻX]gWi gg]cbʻhcd]W]bʻfY`Uhjcbʻhcʻh\Y`k YY\_`mfYUX]b[gžcfʻh\Y`YWhi fYʻWcbhYbh'ʻ9UW\ hi hcf]U``k]```Wf]hJWU``mYb[U[Y`k]h\`k\Uhighi XYbhgʻ\Uj Y``YUfbhih\Uhik YY\_žUbXʻh\YgYX]gWi gg]cbgʻk]```UJX`mci ʻhc`k f]hYʻmci fʻZjbU``UggYgga Ybh'

#### Cb`lbY'Eiln

### 5ggYgga Ybh'HUg\_g'

BchYrh\YgYrhcd]\Mg^\Uj YrVYYb``YZhei]hYrVfcUXrgcrmcirk]```\Uj Yrh\YrZYl]V]`]hmhcrXYj Y`cdrmcifckbr]XYUgUbXrUddfcUW\hcrh\Yrhcd]\M

: cf'h\]g'YggUmžghi XYbhg'UfY'Yl dYWhYX'hc.

- 7 YUfm]bffcXi Wfh\Yhcd]Wcf]ggi Y
- Cih]bY'h\Y'\]ghcfmUbX'WcbhYI hcZh\Y]f'W\cgYb'hcd]Wcf']ggiY
- 7 YUfmUf[iYhX]fdcg]hcbcbhXYWxcgYbhcd]Wcf]ggiY
- 8 ]gW gg 'h\Y 'fY`Yj UbWY 'cZh\ ]g 'hcd]Wcf' ]ggi Y 'Zcf'gcWJU` k cf\_Yfg
- 8 ]gW gg h\Y ]a d`]WUh]cbg cZh\]g ]ggi Y Zcf gcWJU k cf\_dfUW]WY

5ggYgga Ybh& GY`ZfYZYW]cb

#### GHJfh'XUhY.

**8 Y h u**] `g. `8 Y g W f] d h] c b. `&) \$\$! k c f X `f Y Z Y W f] c b `c b `U `hc d ] W f Y `Y j Ub h hc `h\ Y `W c i fg Y : Y Y X V U W \_. `K f] h h Y b `Z Y Y X V U W \_. `K f] h Y b `Z Y X V U W \_. `K f] h Y B Y A Y X V U W \_. `K f] h Y B Y A Y X Y W A Y X Y W A Y X Y W A Y X Y Y X Y W A Y X Y Y X Y W A Y X Y Y X Y Y X Y W A Y X Y Y

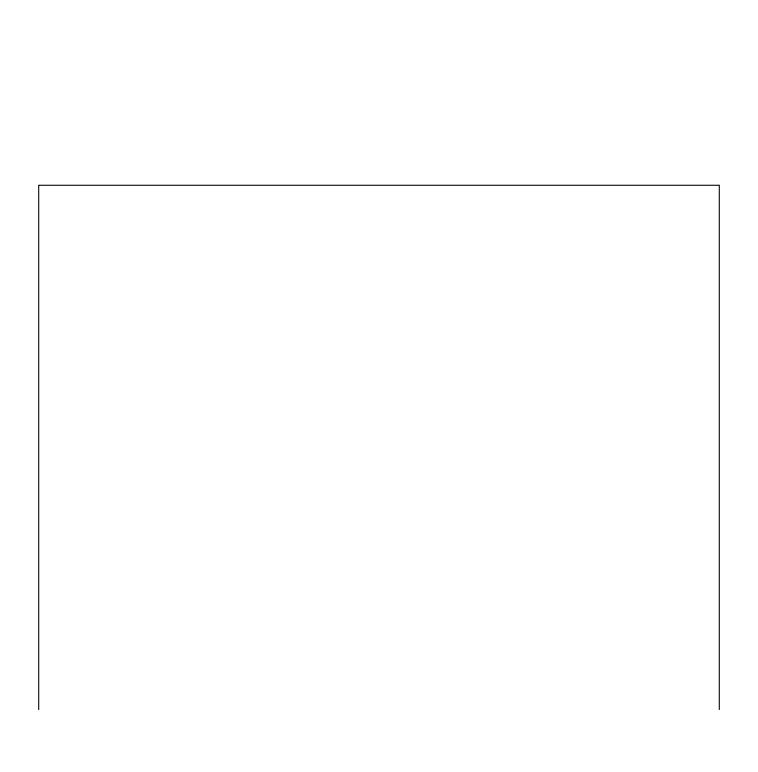
#### 5XX]h]cbU`XYhU]`g.

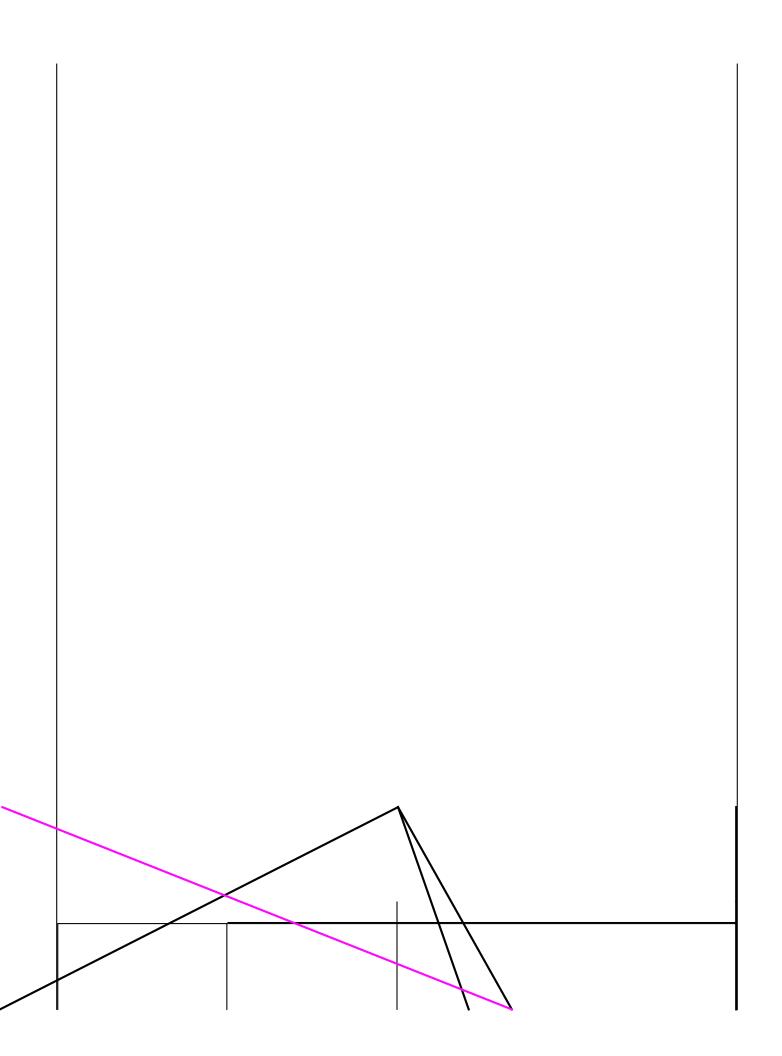
 $H\setminus ]g: UggYgga\ Ybh]g: U: Wf]h]WU: gY: ZfYZYWf]cb: cb: mci f'ci fbYmh\fci [\ci hh\Y: Wci fgY": Mci k]: bYYX: hc k f]hY UVci hk \Uhmci \Uj Y: YUfbhUbX: \ck: mci \Uj Y: fYUWfYX: UbX: ]bhYfUWfYX: k]h\ h\Y: Wci fgY: WcbhYbhUbX: mci f gcW]U: k cf_'dYYfg": < ck: \Uj Y: mci f'dYfWfdh]cbg: cb: h\Y: j Uf]ci g: hcd]Wg: YI d`cfYX: h\fci [\ci hih\Y: Wci fgY WcbhYbhUbX: mci f gY W\Ub[YX:g]bWF: h\Y: VY[]bb]b[: cZhYfa 3:K \Uhhcd]Wg: a UXY: U: dUfh]W: `Uf: ]a dUWficb: mci : UbX: k \m8 \all a dcfhUbhmžk \UhXc: h\YgY: YUfb]b[: g: a YUb: Zcf: \ck: mci k]: ``UddfcUWX: mci f: fc: Y: Ug: U: gcW]U: k cf_Yf: ]b: h\YZY: X3$ 

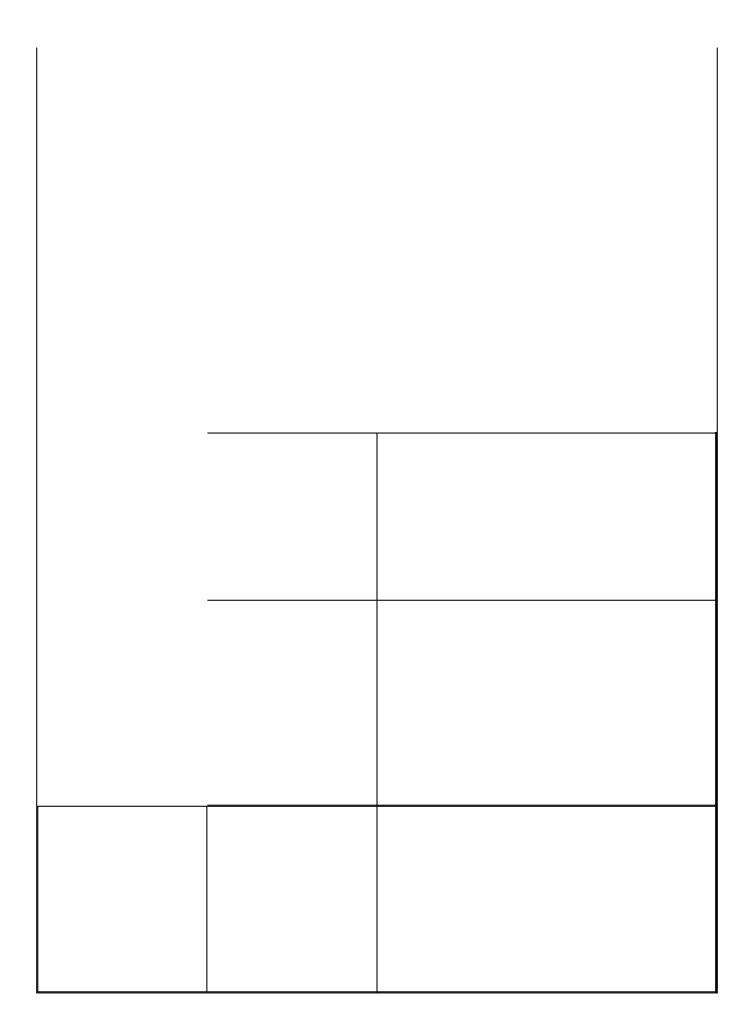
Hc'U]X']b'k f]h]b['h\]g'gY'ZfYZYWf]j Y'YggUmž'k Y'glfcb['mYbWci fU[Y'ghi XYbhg'hc'\_YYd'U'fYZYWf]j Y'ci fbU'h\Uhmci 'k f]hY']b'fY[i 'Uf'm'Zc'`ck]b[''YWhi fYg'UbX'hi hcf]U'gžUbX'UZhYf'Yb[U[]b['k]h\Y'Wci fgY'WcbhYbh' Ghi XYbhg'UfY'YI dYWhYX'hc'i gY'W]hUh]cbg'Zfca 'h\Y'Wci fgY'WcbhYbhžUbX'gY`ZfYZYWf]j Y'`]hYfUhi fY']b'h\Y'k f]h]b[cZh\]g'YqqUm'

Gi Va ]qq]cb'bchYq.H\]q']q'h\Y']bU``UqqYqqa YbhZcf'h\Y'Wci fqY

 $\label{thm:continuous} \begin{tabular}{ll} Hi & fb & fb & gYM &$ 







Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

### 5 WUXYa ]W<cbYghmUbX D`U[ ]Uf]ga

D`U[]Uf]ga `]g`i g]b[ 'h\Y`k cfXg`cf`]XYUg`cZch\Yfg`UbX`dfYgYbh]b[ 'h\Ya `Ug`mci f`ck b"'=hWJb'hU\_Y`a Ubm Zcfa gžZfca `XY`]VYfUhY`W\YUh]b[ 'hc`UWW]XYbhU`mWcdm]b[ 'Zfca `U`gci fWY'k ]h\ci hUW\_bck `YX[ Ya Ybh'

IBGK [fcidg'd'U[]Uf]ga ]bhc'h\Y'Zc``ck]b[ WUhY[cf]Yg.

7 cdm]b[.'i g]b['h\Y'gUa Y'cf'j Yfmg]a ]`Uf'k cfXg'hc'h\Y'cf][]bU`hYl h'cf']XYU'k ]h\ci h'UW\_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf\_g"'H\]g'U`gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfcYWhgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k \YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k ]h\ci h'WfYX]h'

⇒ Uddfcdf]UhY 'dUfUd\fUg]b[...7\Ub[]b[ 'U'ZYk 'k cfXg'UbX'd\fUgYg'k \]'Y 'a cghmfYhJ]b]b[ 'h\Y'cf][]bU` ghfi Wh fY 'UbX#cf'dfc[fYgg]cb'cZ]XYUg'cZh\Y'cf][]bU'žUbX']bZcfa Uh]cb'k ]h\ci hUW\_bck `YX[Ya Ybh'H\]g'U`gc Udd`]Yg']b'dfYgYbhUh]cbg'k \YfY'gca YcbY'dUfUd\fUgYg'Ubch\Yf'g']XYUg'cf'k cfXg'k ]h\ci hWfYX]hUbX'hc d]YW]b[ 'hc[Yh\Yf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk 'k \c`Yžk]h\ci hUddfcdf]UhY'fYZYfYbW]b[ "

7 c``i g]cb.'k cf\_jb['k]h\ch\Yfg'Vi hdUgg]b['cZZh\Y'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'Ubch\Yf'ghi XYbhVYZcfY'h\Y'Xi Y'XUhYžcf'Zcf'h\Y'di fdcgY'cZh\Ya d`U[]Uf]g]b['UhiUbmh]a Yž'dUm]b['Ubch\Yf'dYfgcb'hc'dYfZcfa 'Ub'UWUXYa ]WhUg\_ž'ghYU']b['cf'UWei]f]b[ Ubch\Yf'dYfgcb'g'UWUXYa ]Wk cf\_'UbX'Wcdm]b[']hz'cZYf]b['hc'Wca d'YhY'Ubch\Yf'dYfgcb'g'k cf\_'cf'gYY\_]b[ dUma YbhZcf'Wca d'Yh]b['UWUXYa ]Wk cf\_"

±bUddfcdf]UhY`W]hUh]cb.`7]h]b[ˈgci fWYg'k\]WX`\Uj Y`bchVYYb`fYUXžk]h\ci hUW\_bck`YX[]b[`h\Y`″gYWcbXUfm″gci fWY`Zfca 'k\]WX`\_bck`YX[Y`cZh\Ya`\Ug'VYYb`cVhU]bYX"

8 i d`]\WUh]cb`ffgY`Zd`U[]\Uf]ga "Ł gi Va]\h]b[`mci f`ck b`k cf\_ž]b`k \c`Y`cf`]b`dUfhžk \YfY`]h\Ug`dfYj]ci g`m VYYb`dfYdUfYX`cf`gi Va]\hYX`Zcf`Ubch\Yf`UggYgga Ybhcf\Wci fgY`UhI BGK `cf`Ubch\Yf`i b]j Yfg]\m'

7 cffYWnfYZYfYbWlb[ 'dfUWnWyg.

- DUfUd\fug]b[ ž'gi a a Uf]g]b[ ž'YggUmk f]h]b[ "UbX"h]a Y a UbU[ Ya Ybh
- 5ddfcdf]UhY'i gY'cZUbX'Uhf]Vi h]cb'Zcf'U'fUb[Y'cZa UhYf]U`g']b\$

**‰** ∪,



# 5WUXYa]W±bZcfaUhjcb

: cf`YggYbhJU``ghi XYbh`]bZcfa UhJcb`fY`UhJb[ 'hc.

- fYei Yghg Zcf Yl hYbg]cb/`UhY gi Va ]gg]cbg [ i ]XY`]bYg/