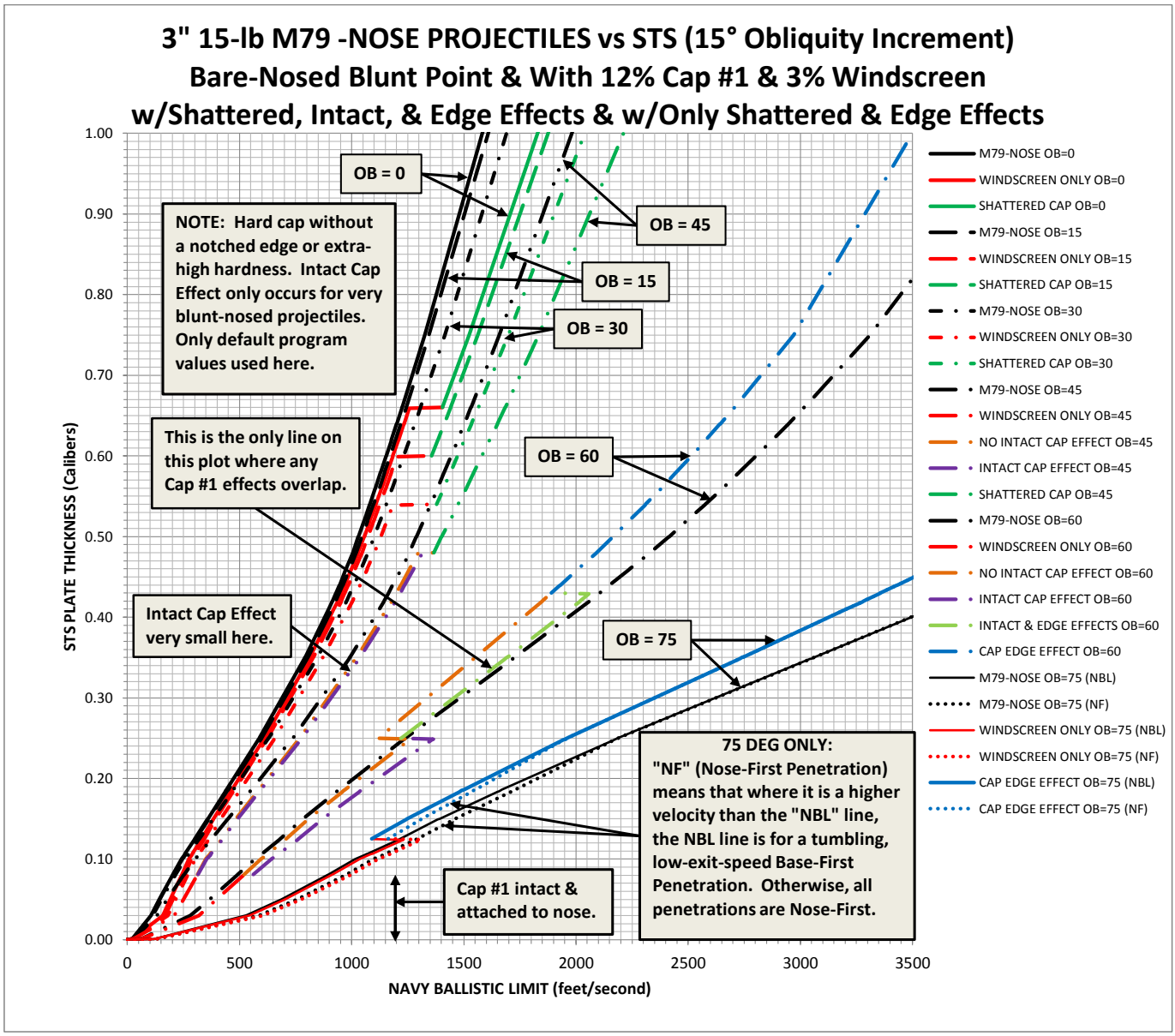
3" 15-lb M79 -NOSE PROJECTILES vs STS (15° Obliquity Increment)
Bare-Nosed Blunt Point & With 12% Cap #1 & 3% Windscreen
w/Shattered, Intact, & Edge Effects & w/Only Shattered & Edge Effects
STS PLATE THICKNESS (Calibers)
NAVY BALLISTIC LIMIT (feet/second)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
500
1000
1500
2000
2500
3000
3500
OB = 0
OB = 45
OB = 15
OB = 30
OB = 60
OB = 75
NOTE: Hard cap without a notched edge or extra-high hardness. Intact Cap Effect only occurs for very blunt-nosed projectiles. Only default program values used here.
This is the only line on this plot where any Cap #1 effects overlap.
Intact Cap Effect very small here.
Cap #1 intact & attached to nose.
75 DEG ONLY:
"NF" (Nose-First Penetration) means that where it is a higher velocity than the "NBL" line, the NBL line is for a tumbling, low-exit-speed Base-First Penetration. Otherwise, all penetrations are Nose-First.
M79-NOSE OB=0
WINDSCREEN ONLY OB=0
SHATTERED CAP OB=0
M79-NOSE OB=15
WINDSCREEN ONLY OB=15
SHATTERED CAP OB=15
M79-NOSE OB=30
WINDSCREEN ONLY OB=30
SHATTERED CAP OB=30
M79-NOSE OB=45
WINDSCREEN ONLY OB=45
NO INTACT CAP EFFECT OB=45
INTACT CAP EFFECT OB=45
SHATTERED CAP OB=45
M79-NOSE OB=60
WINDSCREEN ONLY OB=60
NO INTACT CAP EFFECT OB=60
INTACT CAP EFFECT OB=60
INTACT & EDGE EFFECTS OB=60
CAP EDGE EFFECT OB=60
M79-NOSE OB=75 (NBL)
M79-NOSE OB=75 (NF)
WINDSCREEN ONLY OB=75 (NBL)
WINDSCREEN ONLY OB=75 (NF)
CAP EDGE EFFECT OB=75 (NBL)
CAP EDGE EFFECT OB=75 (NF)