FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPRO	DVAL								
OMB Number:	3235-0287								
Estimated average burden									
hours per response:	0.5								

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person*  O TOOLE ROBERT J							2. Issuer Name and Ticker or Trading Symbol SMITH A O CORP [ AOS ]									k all app Dired	olicable)	10%	Person(s) to Issuer  10% Owner Other (specify		
(Last) (First) (Middle) A. O. SMITH CORPORATION 11270 WEST PARK PLACE								3. Date of Earliest Transaction (Month/Day/Year) 12/15/2004									X Officer (give title Other (specify below)  Chairman and CEO				
(Street)  MILWAUKEE WI 53224  (City) (State) (Zip)								4. If Amendment, Date of Original Filed (Month/Day/Year)									Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person				
			Tabl	e I - N	on-Deriv	/ative	Sec	uritie	s Ac	quired	d, Di	sposed o	f, or	Benef	icially	Owne	ed				
1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/							Execution Date,		Date,	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 a			and 5) Secu Bene		icially d Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
							Code	v	Amount	(A) (D)	Pri	e	Trans	action(s) 3 and 4)		(11150.4)					
Common Stock 12/15/20							)04		S		27,800	D	\$2	\$29.4882		97,118	D				
Common Stock 12/16/20						2004	)04		S		26,712	D	\$2	\$29.4401		1 370,406					
Common Stock 12/15/20					2004	)04			F		25,358	D	\$2	\$29.515		345,048					
			Та	ble II								osed of, convertib				wned					
1. Title of Derivative Security (Instr. 3)	2. Conversi or Exerci Price of Derivativ Security	on se	3. Transaction Date (Month/Day/Year)	if any	emed on Date, Day/Year)	4. Transa Code ( 8)		5. Nui of Deriv. Secul Acqu (A) or Dispo of (D) (Instr. and 5	ative rities ired osed	6. Date Exercisable and Expiration Date (Month/Day/Year)  Date Expiration Exercisable Date			7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)  Amoun or Numbe of		De Sei (Ins	Price of rivative curity str. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)		

**Explanation of Responses:** 

Remarks:

Robert J. O'Toole, Attorney-in-Fact for Robert J. O'Toole

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- \* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.