Filing fee: \$15.00

To be filed annually between January 1st and March 1st

# State of Rhode Island and Providence Plantations OFFICE OF THE SECRETARY OF STATE

SECOND: It is incorporated under the laws of OMO THIRD: Character of business, briefly stated, is MANIAMENTO FOURTH: If foreign corporation, address of its principal office 23555 EMMA ACTUAL CHECAMA CHAC 44417  FIFTH: Business address in Rhode Island (blank reports will be mailed to this dress) CTCAMPOLATION SYSTEM MI WASTAMASTER ST., FROMERIE AT 0.390  SIXTH: Names and addresses of its directors and officers:  (Addresses must include street and number, if any)  Name Office Address  Director  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value  or statement that shares are without par value  THE EIGHTH: Number of Shares issued:  No. of Shares  Class  Series  APR 21 196  TRIM STATE THE  EIGHTH: Number of Shares issued:  (Name of Concration)  By Apr 21 196  TRIM STATE THE  F.H. Kettle  Title V.R.S. S. Controller  (Report must We signed by an officer)			Annual Repo	ort for the yea	r /905
THIRD: Character of business, briefly stated, is MANIFORMEN  FOURTH: If foreign corporation, address of its principal office  25555 Each Areae, Verland, Chic 4417  FIFTH: Business address in Rhode Island (blank reports will be mailed to this idress) CTechpolation System in Wissmontes 57. Providence At C296  SIXTH: Names and addresses of its directors and officers:  (Addresses must include street and number, if any)  Name Office Address  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares Class Series  Par Value or statement that almost attachment that almost and the charge are without par value  or statement that charges are value  or statement that charges are without par value  or statem	First:	The name of the corporati	on is	RW INC.	
THIRD: Character of business, briefly stated, is MANNIMERICANS  FOURTH: If foreign corporation, address of its principal office  235555 EUMA ALEMAE, CHIC HAMA  FIFTH: Business address in Rhode Island (blank reports will be mailed to this dress)  CTECAPOLATION SYSTEM IN WASSIMMATES ST. PROMINER AT 0.290  SIXTH: Names and addresses of its directors and officers:  (Addresses must include street and number, it any)  Name Office Address  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value  or statement that shares are without par value  or statement th	Second:	It is incorporated under	the laws of	Оню	
FIFTH: Business address in Rhode Island (blank reports will be mailed to this dress)  CTECAPOLATION SYSTEM IN WASHINGSTEE ST., PROCESSAGE AT 0290  SIXTH: Names and addresses of its directors and officers:  (Addresses must include street and number, if any)  Name Office Address  Director  Director  Director  Director  Director  President  Vice President  Secretary  Treasurer  Additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that share attached that share are without par value  The Comments Edwart III  EIGHTH: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that share attached that share are without par value  February 23  19 82  TRW Spic.  (Name of Composition)  By Statement Latter  Title V. Ro. & Controller  (Report must be signed by an officer)	THIRD:	Character of business, brie	efly stated, is	MAN'U FACTURING	<u> </u>
FIFTH: Business address in Rhode Island (blank reports will be mailed to this dress)  Creapolation System   III Washington St.   Providence At 0.290  SIXTH: Names and addresses of its directors and officers:  (Addresses must include street and number, if any)  Name Office Address  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares Class Series  Far Value of statement that shares are without par value  Par Value of States authorized:  Far Value of States authorized:  No. of Shares Class Series  Far Value  Office Address  Par Value  Office Officerious Officerious Address  Par Value  Office Officerious Officerious Officerious Address  Par Value  Office Officerious Offi				-	
SIXTH: Names and addresses of its directors and officers:  (Addresses must include street and number, if any)  Name Office Director Director Director President Vice President Secretary Treasurer additional space is needed, attach rider)  SEVENTH: Number of Shares authorized: No. of Shares Class Series  Par Value or statement that shares are without par value  Far Value or statement that shares are without par value  ted: February 23  19 82  TRM Trac. (Name of Officeration) By F. H. Kettle Title V. Par S. Controller  (Report must be signed by an officer)	Fifth:	Business address in Rhod	e Island (blan	k reports wil	l be mailed to this
Name Office Address  Director  Director  Director  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Far Value  or statement that shares are without par value  or statement that shares	dress) CT	Corpolation System 11	1 WESTMINISTER	St. , PROVIDE	ENCE, SI 0390
Name Office Address  Director  Director  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Far Value  or statement that shares are without par value  or statement that shares are withou	SIXTH:	Names and addresses of i	its directors an	d officers:	
Director  Director  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Far United Exhibit III  EIGHTH: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Far Value of Statement that shares are without par value  Far Value of Statement that shares are without par value  Far Value or statement that shares are without par value  Far Val		(Addresses must include stree	et and number, if an	ıy)	
Director  Director  Director  Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Far Value or statement that shares are without par value  THE  EIGHTH: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  THE  THE SERIES SERIES  APP 21 130  APP 21 130  THE TILE  Title V. Ro. & Controller  (Report must be signed by an officer)	N	ame Office		Addr	ess
Director  President  Vice President  Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Far Value or statem	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Director			
President  Vice President  Secretary  Treasurer additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Fighth: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Fighth: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Fighth: Number of Chapter III  APR 21 191  Title V. Ro. & Controller  (Report must be signed by an officer)		Director			
President  Vice President  Secretary  Treasurer additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Fighth: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Fighth: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Fighth: Number of Shares issued:  No. of Shares  TRW Fig.  (Name of Comporation)  By  Fighth: Kettle  Title  V. Ro. & Controller  (Report must be signed by an officer)	,,,	Director		JEE EXH	BITS / AND /A
Secretary  Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Far Value or statement that shares are without par value  Par Value or statement that shares are without par value  TRW Finc.  (Name of Components)  By  TITLE  Title  V. Ro. & Controller  (Report must be signed by an officer)		Presiden	t		ATTACHED
Secretary  Treasurer  Inditional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Far Value or statement that shares are without par value  Par Value or statement that shares are without par value  TRW Proc.  (Name of Corporation)  By  Title  V. Ro. & Controller  (Report must be signed by an officer)		Vice Pres	sident		
Treasurer  additional space is needed, attach rider)  SEVENTH: Number of Shares authorized:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Far Value or statement that shares are without par value  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  Far Value or statement that shares are without par value  Par Value or statement that shares are without par value  Far Value					
No. of Shares  Class  Series  Series  Series  Series  Par Value or statement that shares are without par value  Par Value or statement that shares are without par value  To statement that shares are without par value  The shares are without par value  February 23  19 82  TRW The shares  (Name of Comporation)  By Shares  Title V. Ro. & Controller  (Report must be signed by an officer)		Treasure			
No. of Shares Class Series Shares are without par value    Series   Series   Shares are without par value	SEVENTH	: Number of Shares aut	horized:		Par Value or statement that
EIGHTH: Number of Shares issued:  No. of Shares  Class  Series  Par Value or statement that shares are without par value  True  (Name of Corporation)  By  F.H. Kettle  Title V.R. & Controller  (Report must be signed by an officer)	No. of Shar	es Class	Seri	es	shares are without
No. of Shares  Class  Series  or statement that shares are without par value  ### APP 21 19  ted: February 23  19 82  TRW Fnc.  (Name of Controller  Title V.R. & Controller  (Report must be signed by an officer)		Set	armenes Exhibi	T II	
No. of Shares Class Series par value  ### APR 21 1982  ted: February 23 19 82 TRW Truc. (Name of Controller  Title V.R. & Controller  (Report must be signed by an officer)	Eighth:	Number of Shares issue	ed:		or statement that
ted: February 23  19 82  TRW Fnc. (Name of Corporation)  By  F.H. Kettle  Title V.Bo & Controller  (Report must be signed by an officer)	No. of Shar	es Class	Seri	es	
(Name of Comporation)  By F.H. Kettle  Title V.Ro. & Controller  (Report must be signed by an officer)	. J. Febr	uary 23 10 82	TDUA	4	APR 21 198
Title V.Ro. & Controller  (Report must be signed by an officer)	tea:	19 82	(Name of Co	10	E H Vottle
(Report must be signed by an officer)				S Controllo	
			(vehől)	<del></del>	o by an omoory
	Form #9	must be filed. Please contact C	orporation Division	on for⊖nforma ⇔	tion, 2/7-3040

# As of April 29, 1981

EXHIBIT I

Name	Office	Address	Name	Office	Address
* R. F. Mettler	Chairman of the Board and Chief Executive Officer	(1)	R. M. Lynas R. E. McGinnis	Vice President Vice President	(9) (5)
* S. C. Pace	President and Chief Operating Officer	(1)		Vice President Vice President	(6)
* J. S. Webb	Vice Chairman of the Board	(2)	₽.	Vice President and Treasurer	(1)
* C. R. Allen	Executive Vice President and	(1)	S. C. Phillips	Vice President	(4)
	Chief Financial Officer		G. A. Poe	Vice President	(9)
R. A. Campbell	Executive Vice President	ω)	J. A. Poremba	Vice President	(9)
J. T. Gorman	Executive Vice President	(6)	C. T. Harvie	Assistant General Counsel	(1)
* A. W. Reynolds	Executive Vice President	(9)		and Assistant Secretary	
G. E. Solomon	Executive Vice President	(2)	K. G. Preston	Assistant General Counsel	(1)
L. N. Hand	Senior Vice President and	(7)	J. E. Terrell	Assistant General Counsel	(1)
	Assistant to the Chairman			and Assistant Secretary	
R. L. Ashley	Vice President	(3)	R. F. Britton	Assistant Secretary	(1)
E. N. Button	Vice President	(8)	T. R. Brown	Assistant Secretary	(2)
M. A. Coyle	Vice President, General Counsel	(1)	A. J. Coakley, Jr.	Assistant Secretary	(3)
	and Secretary		J. E. Davis	Assistant Secretary	(2)
T. J. Fay	Vice President	(1)	C. R. Ennis	Assistant Secretary	(9)
J. S. Foster, Jr.	Vice President	(1)	W. E. Gallas	Assistant Secretary	(4)
G. A. Harter	Vice President	(L)	W. B. Lawrence	Assistant Secretary	(6)
K. E. Heller	Vice President	(3)	J. J. McKee	Assistant Secretary	(2)
A. J. Kelley	Vice President and Assistant	(1)	Ξ.		(1)
	Chief Financial Officer		L. Pete		(5)
F. H. Kettle	Vice President and Controller	(1)	W. R. Phillips	Assistant Secretary	(1)
H. V. Knicely	Vice President	(1)	W. W. T. Stephans	Assistant Treasurer	(1)
R. M. Lehman	Wice Droppidont	(9)	D. M. Steuert	Assistant Treasurer	(1)

Also a Director

Addresses -- parenthetical figures above refer to the following locations:

	(4) 9841 Airport Boulevard, Los Angeles, California 90045	(3) 1~880 Wilshire Boulevard, Los Angeles, California 90024 (7) 2030 M	(2) One Space Park, Redondo Beach, California 90278	(1) 23555 Euclid Avenue, Cleveland, Ohio 44117
	(8)	24 (7)	(6)	(5)
(9) 30000 Aurora Road, Solon, Ohio 44139	33 River Street, Chagrin Falls, Ohio 44022	2030 M Street, N.W., Washington, D.C. 20036	20600 Chagrin Boulevard, Cleveland, Ohio 44122	(5) 31 Burlington Mall Road, Burlington, Massachusetts 01803

### EXHIBIT 1A

### DIRECTORS OF TRW INC.

John A. Alexander Krieg DeVault Alexander & Capehart 2800 Indiana National Bank Tower One Indiana Square Indianapolis, Indiana 46204

Charles R. Allen TRW Inc. 23555 Euclid Avenue Cleveland, Ohio 44117

Richard D. DeLauer TRW Inc. One Space Park Redongo Beach, California 90278

Sir Alastair Down
The Burmah Oil Company Limited
Burmah House, Pipers Way
Swindon, Wiltshire SN3 1RE
England

W. H. Krome George Aluminum Company of America 1501 Alcoa Building Pittsburgh, Pennsylvania 15219

Ruben F. Mettler TRW Inc. 23555 Euclid Avenue Cleveland, Ohio 44117

Stanley C. Pace TRW Inc. 23555 Euclid Avenue Cleveland, Ohio 44117

Jack S. Parker General Electric Company 3135 Easton Turnpike Fairfield, Connecticut 06431 Simon Ramo TRW Inc. One Space Park Redondo Beach, California 9027

A. William Reynolds TRW Inc. Tower East, 10th Floor 20600 Chagrin Boulevard Cleveland, Ohio 44122

Horace A. Shepard TRW Inc. 23555 Euclid Avenue Cleveland, Ohio 44117

Charles E. Spahr 1901 Terminal Tower Building Cleveland, Ohio 44113

H. Guyford Stever 1528 33rd Street, N.W. Washington, D.C. 20007

J. Sidney Webb TRW Inc. One Space Park Redondo Beach, California 9027

Gerald B. Zornow 6 Tobey Woods Pittsford, New York 14534

# TRW INC. CAPITAL STOCK DECEMBER 31, 1981

## EXHIBIT III

CLASS	SERIES	PAR VALUE	NUMBER OF SHARES AUTHORIZED	NUMBER OF SHARES ISSUED
Common		\$1.25	50,000,000	33,256,815*
Preference	11	No Par Value	5,000,000	1,824,366
Preference		No Par Value	99,536	-0-

<sup>\*</sup>Excluding Treasury Shares of 679,928.