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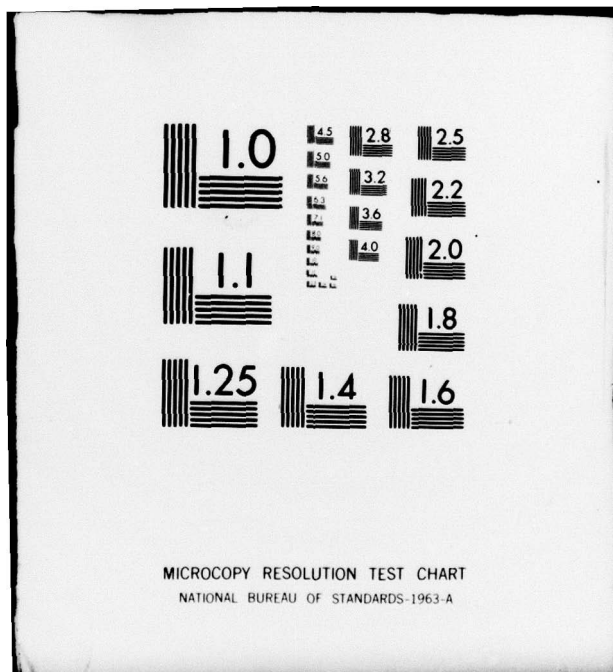
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STATUS REPORT ON INTERNATIONAL INTERACTION - NOVEMBER, 1970

Gary D. Hoggard,
University of Southern California
December 15, 1970

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This paper is the second in a series of reports issued by the World Event/Interaction Survey to summarize the status of the development of procedures for monitoring international interaction on a monthly basis. The first report outlined the procedure employed in this monitoring activity, reported those countries exhibiting significant deviations from past international activity in September and October, 1970, and outlined plans for further additions and modifications of the monitoring procedure.¹

The purpose in undertaking this monitoring activity is to develop and evaluate indicators from the World Event/Interaction Survey (WEIS) data which are sensitive to detecting changes in the activity of specific countries engaged in international interaction. Previous research on interaction processes in conflict and crisis situations indicates that such changes occur in international interaction prior to the outbreak of hostilities. The monitoring procedure is thus an integral part of the overall effort to identify and project the outcome of processes in ongoing international interaction.

This procedure, outlined in more detail in the original report, involves

- 1) establishing statistical characterizations of past international activity for each of 118 political entities included in the monitoring activity;
- 2) establishing parameters based on these characteristics of past performance to provide thresholds beyond which the current activity of a given country can be said to represent a significant departure from past behavior;
- 3) comparing current international activity against these parameters to identify countries which have changed their international activity in a manner not reflected in their past per-

*Prepared in support of Office of Naval Research Contract N00014-67-A-0269-0004

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formance; and

- 4) investigating the interaction of those countries so identified, through more detailed queries of the analytic and descriptive files of the WEIS project data, to identify the reasons for the occurrence of the deviations from past international activity.

It should be noted that, due to the preliminary nature of this research, no attempt has been made to date to analyze the relationships in the data presented or to predict future international activity. As the monitoring procedure is further developed and evaluated, and as our activity to develop expertise in the use of sophisticated analytic and predictive techniques progresses, such analyses and predictions will be included in the monthly status reports.

The initial report included a monitoring of two indicators for each of 118 countries. The total activity each country had originated and received in the preceding 56 months formed the data base for the parameters against which their activity in September, 1970 was evaluated for significant deviations from past behavior. The procedure was repeated for October, using recomputed parameters based on the preceding 57 months. The report for November is likewise based on parameters recomputed to include the October data, but also includes additional variables discussed below.

Two major modifications of the data included in the monitoring procedure have been completed during the past month, resulting in the monitoring of a total of 12 variables for each of the 118 countries. In addition to the total activity originated and received by each country, the November report includes a monitoring of the "cooperative" and "conflictful" behavior originated and received by each country. The subsets of the WEIS behavior categories forming the data bases for the monitoring of cooperative and conflictful types of behavior are outlined below:

Cooperative Behavior

Yield
Comment
Consult
Approve
Promise
Grant
Reward

Conflictful Behavior

Reject
Accuse
Protest
Deny
Demand
Warn
Threaten

Cooperative Behavior

Agree
Request
Propose

Conflictful Behavior

Demonstrate
Reduce Relations
Expel
Seize
Force

The second major modification represents an attempt to create parameters for detection of significant deviations from past performance which are based on more recent data than the entire data base since 1966. Our assumption in adding a shorter-range perspective to the monitoring procedure is that the comparison of current behavior to parameters established from more recent data will yield more accurate indicators of changed international behavior than comparisons with parameters based on the entire data collection of the WEIS project. International interaction in the Middle East serves as a useful example. More accurate and sensitive indicators of change may be provided if, for example, the current activity of Israel and the United Arab Republic is compared against parameters which do not include the data of the June 1967 conflict, than would be provided if the entire WEIS data collection since 1966 were included in the derivation of past performance characteristics and their associated parameters. The assumption is that it may be more important to evaluate current behavior against more recent interaction than against interaction which took place almost five years ago. The decision was therefore made to include two data bases in the monitoring procedure against which to evaluate current international activity: one encompassing the entire time span of the WEIS data collection, and one consisting of only that interaction occurring in 1970.

The significant deviations from past behavior, reported below for November 1970, thus consist of a monitoring of the cooperative, conflictful, and total volume of activity originated and received by the 118 countries included in the monitoring procedure, evaluated against their total past performance and their past activity in 1970, for a total of 12 indicators for each country.

Table 1 shows those countries exhibiting behavior which is significantly different from their past performance, ranked according to the percentage of the 12 parameters their activity exceeded in November, 1970.

TABLE 1
Rank Order of Percentage Indicators
Detecting Significant Deviations from
Previous Behavior

<u>Country</u>	<u>Percentages</u>
Guinea	100.00
Italy	75.00
Portugal	66.67
Taiwan	66.67
Chile	66.67
Vatican	66.67
Poland	58.33
Pakistan	50.00
Paraguay	41.67
N. Vietnam	33.33
China	33.33
Syria	33.33
Ethiopia	33.33
Sudan	25.00
Cuba	16.67
NATO	16.67
Israel	8.33
S. Vietnam	8.33
Libya	8.33
South Africa	8.33
Argentina	8.33

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Table 2 provides a more detailed outline of the specific indicators detecting significant deviations from past activity, expressed in standardized (Z) scores, and outlines the 12 indicators included in the monitoring procedure. The deviations from past cooperative, conflictful and total activity originated (output) and received (intake) are presented for both the parameters derived from the WEIS data for 58 months, from January, 1966 through October, 1970 (N = 58), and the data for the 10 months of 1970 (N = 10).

The country with the largest percentage of indicators reflecting deviations from past performance, and with the largest magnitude of change is Guinea. The deviations for both Guinea and Portugal reflect the interaction resulting from the invasion of its territory by Portugal alleged by Guinea on November 22.

The deviations from past total and conflictful activity for Italy and Taiwan reflect the exchange of diplomatic recognition between China and Italy, and the resulting breaking of diplomatic relations with Italy by Taiwan. In addition, the Taiwan deviations from past conflictful behavior reflect their reaction to the U.N. General Assembly discussions of membership for China. In addition to their recognition of China, Italian deviations from past cooperative behavior reflect their reconciliation with Ethiopia after 35 years, symbolized by Emperor Haile Selassie's visit to Italy in November. Ethiopia's deviations from past total and cooperative activity received also reflect this reconciliation effort by Italy.

The deviations from past total and cooperative behavior exhibited by Chile and Cuba reflect interaction leading to the reestablishment of diplomatic relations between the two countries, and the signing of a treaty recognizing the Oder-Neisse Line as the border between Germany and Poland.

Deviations for Pakistan result from the international disaster relief efforts in response to the cyclone and tidal wave that struck East Pakistan. Deviations from past Vatican activity reflect Pope Paul's Asian tour and his activities with respect to the East Pakistan disaster.

The level of activity generated by Paraguay in its condemnations of Argentina at the Latin American Free Trade Association meeting, for policies damaging to the Paraguayan economy, is reflected in the deviations for both Paraguay and Argentina.

TABLE 2
Deviations from Previous Activity
by Behavior Type

<u>Country</u>	<u>Total Activity</u>			
	<u>Output</u>		<u>Intake</u>	
	(N = 58)	(N = 10)	(N = 58)	(N = 10)
Guinea	6.85	20.25	7.25	23.85
Italy	2.82	3.38	4.00	3.28
Portugal	2.11	2.29	3.48	2.09
Taiwan	2.01	2.79	2.86	2.12
Chile	2.27	3.43	5.42	6.36
Vatican	2.60	2.29	3.61	3.36
Poland		4.24	5.15	6.63
Pakistan			6.35	15.25
Paraguay	4.71	10.44		
N. Vietnam	2.49		2.16	
China				2.22
Ethiopia			2.20	4.03
Sudan			2.75	
Cuba				2.71
NATO				2.38
Argentina				3.10
	<u>Cooperative Behavior</u>			
Guinea	6.34	7.50	8.55	9.37
Italy	3.42	2.95	2.93	
Chile	3.40	3.72	5.15	4.95
Vatican	2.38	2.06	4.26	5.61
Poland	3.22	6.37	4.25	6.22
Pakistan	2.82	7.66	6.67	19.09
Paraguay	3.31	7.66		
China	2.09		2.41	3.02
Syria	2.06	2.65	2.90	2.93
Ethiopia			2.74	4.95
Sudan	2.06		2.83	
Cuba				2.85
Libya	2.40			
South Africa			3.52	
	<u>Conflictful Behavior</u>			
Guinea	6.45	9.18	4.62	7.25
Italy			2.52	2.17
Portugal	4.31	4.33	5.69	13.78
Taiwan	4.65	9.18	8.52	12.34
Paraguay	4.26			
N. Vietnam	3.21		2.42	
NATO				4.27
Israel		-2.01		
S. Vietnam			2.27	

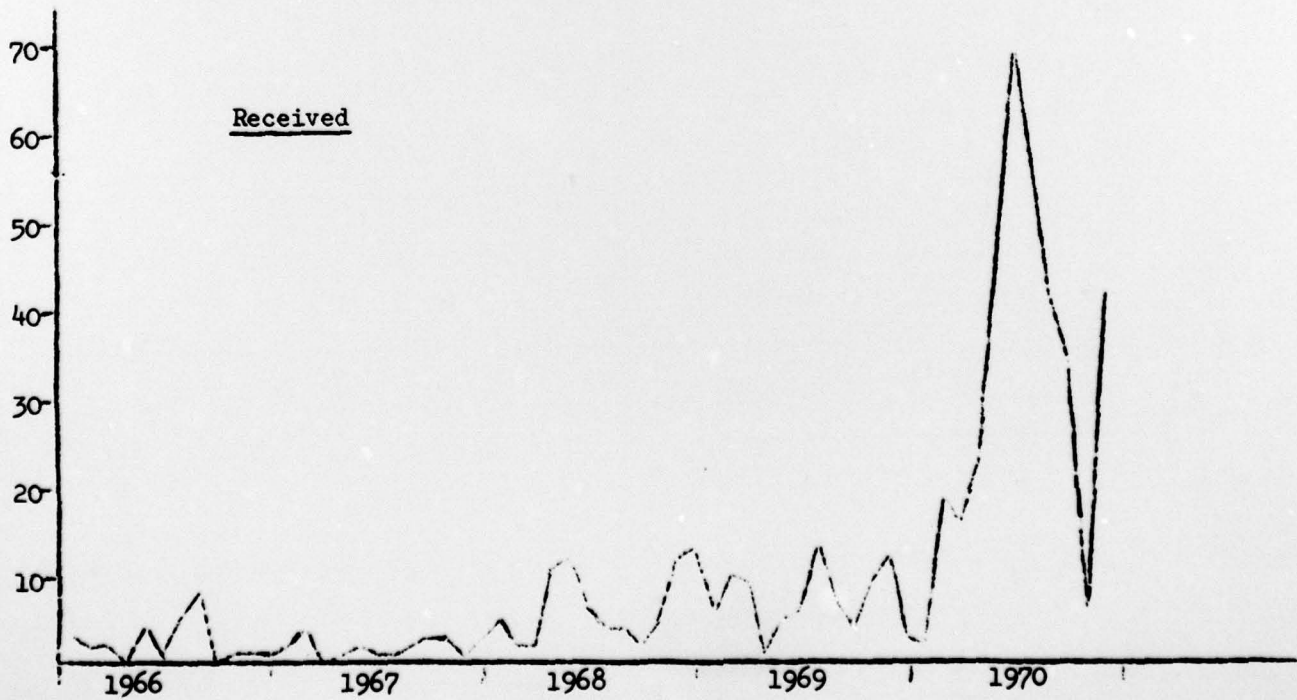
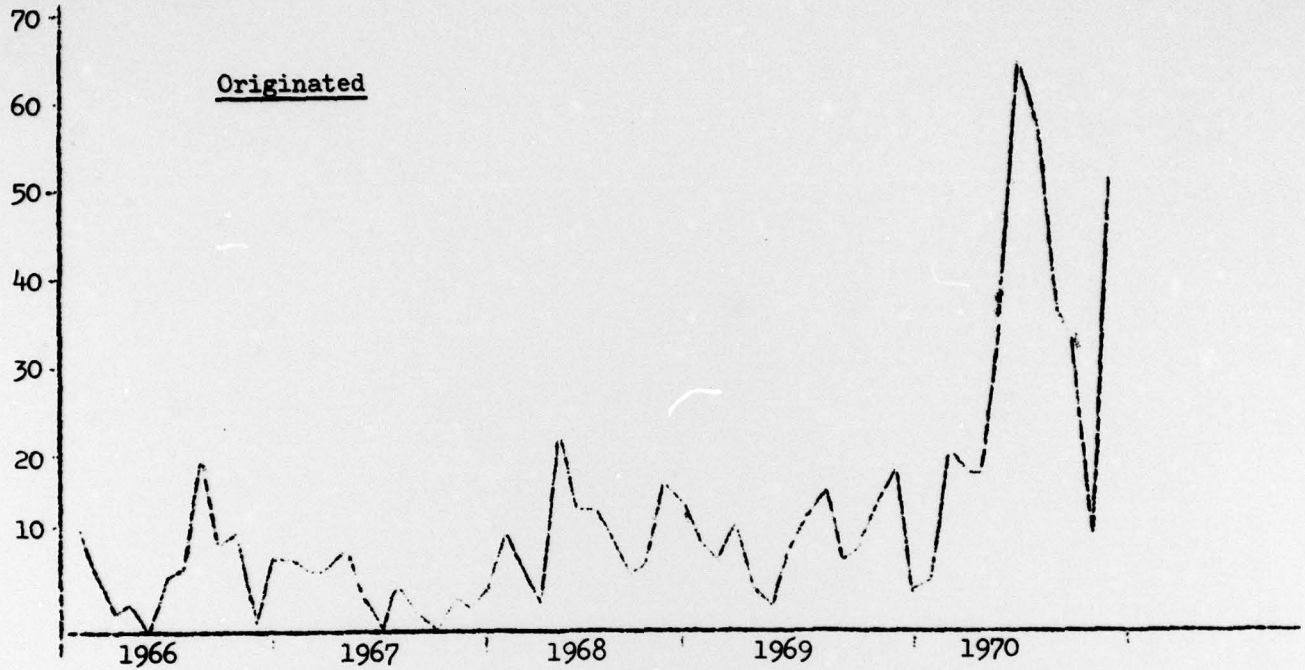
North Vietnamese total activity continues to reflect significant deviations for both output and intake of interaction, as it did in October. The October deviations represented North Vietnamese reaction to President Nixon's October 7 speech proposing a ceasefire in Indochina. The November deviations from past total and conflictful behavior primarily reflect their reaction to the November 21 bombing of North Vietnam and attempted rescue of U.S. prisoners of war. The October report presented profiles of past total activity originated and received by Vietnam. Figure 1 outlines the volume of their past output and intake of conflictful behavior. The significant increase in their conflictful behavior can readily be seen. North Vietnamese activity continues to be dominated by interaction with the U.S., South Vietnam, and Cambodia, and by military force behavior. Figure 2 summarized 1970 interaction in Indochina. Military engagements (as reported) in Vietnam continued to decline in November. The activity between Cambodia and the North Vietnamese and Vietcong also continued to decline, following the substantial decrease which took place in September. South Vietnam's deviation from past intake of conflictful behavior reflects increased military engagements resulting from their November foray into Cambodia.

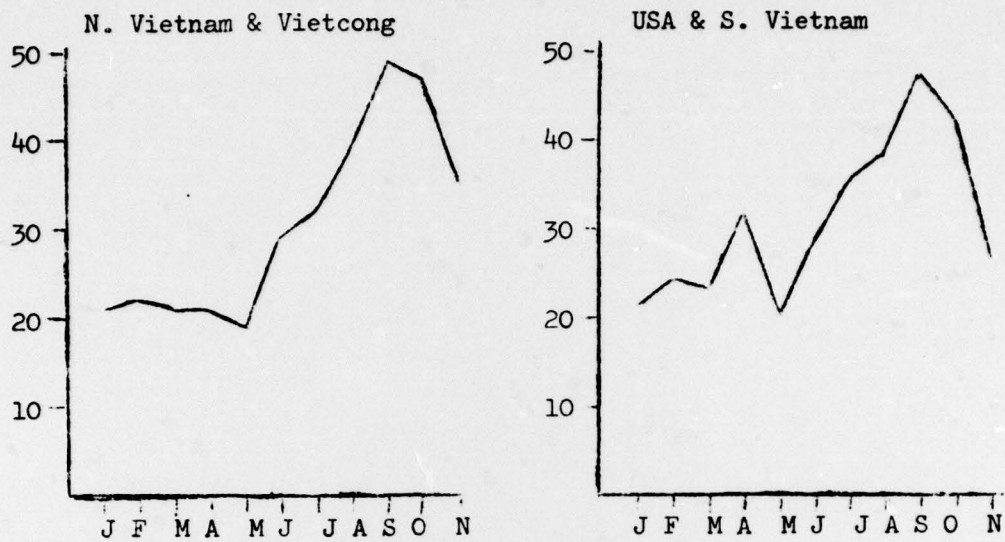
The Chinese deviations from past total and cooperative behavior primarily reflect the UN General Assembly deliberations on membership for China, its establishment of diplomatic relations with Italy, and increased friendly interaction with the Soviet Union, characterized by a new exchange of ambassadors, activity surrounding a new trade agreement between the two countries and Chinese proposals for settling outstanding differences with the USSR.

The deviations for Syria, Sudan, and Libya result from the interaction surrounding an initial agreement between the U.A.R., Libya and the Sudan on an alliance to work toward eventual federation.

The only country exhibiting behavior significantly less than expected based on past activity is Israel. Israeli-originated conflictful behavior, outlined in Figure 3, is significantly different in November from the conflictful behavior it originated in the first ten months of 1970. Figure 3 also includes an outline of conflictful behavior originated by the United Arab Republic. The levels of activity for both countries reflect the cease fire currently in effect in the Middle East.

FIGURE 1
North Vietnamese
Conflictful Behavior





Military Engagements in Vietnam

FIGURE 2
1970 Interaction in Indochina

Activity in Cambodia

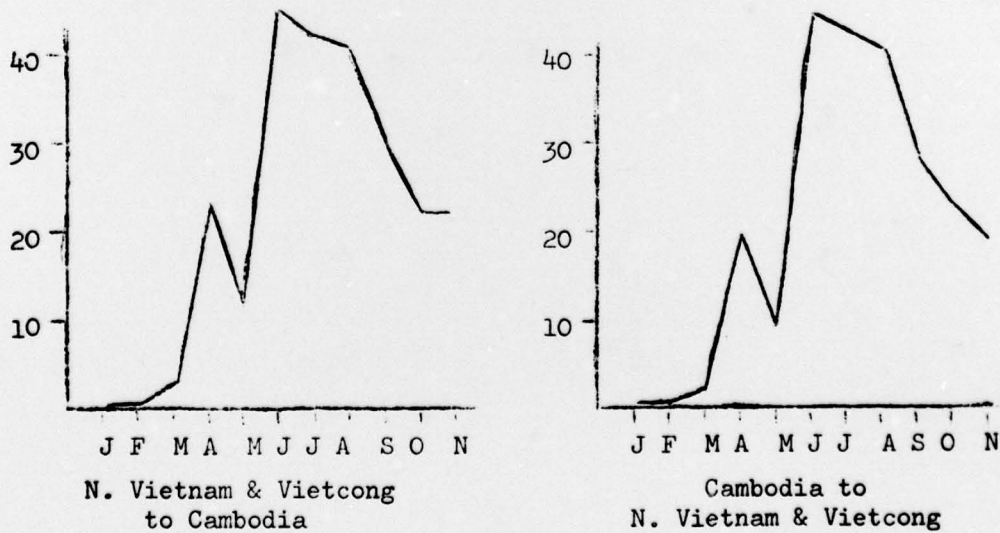
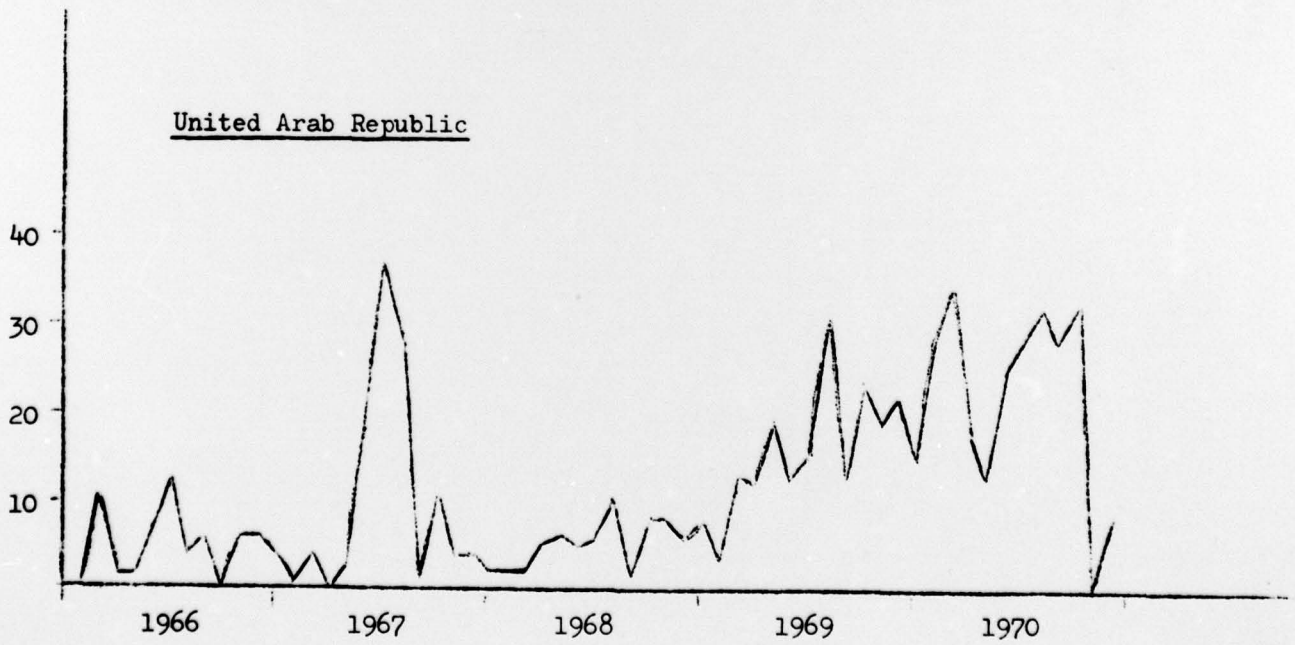
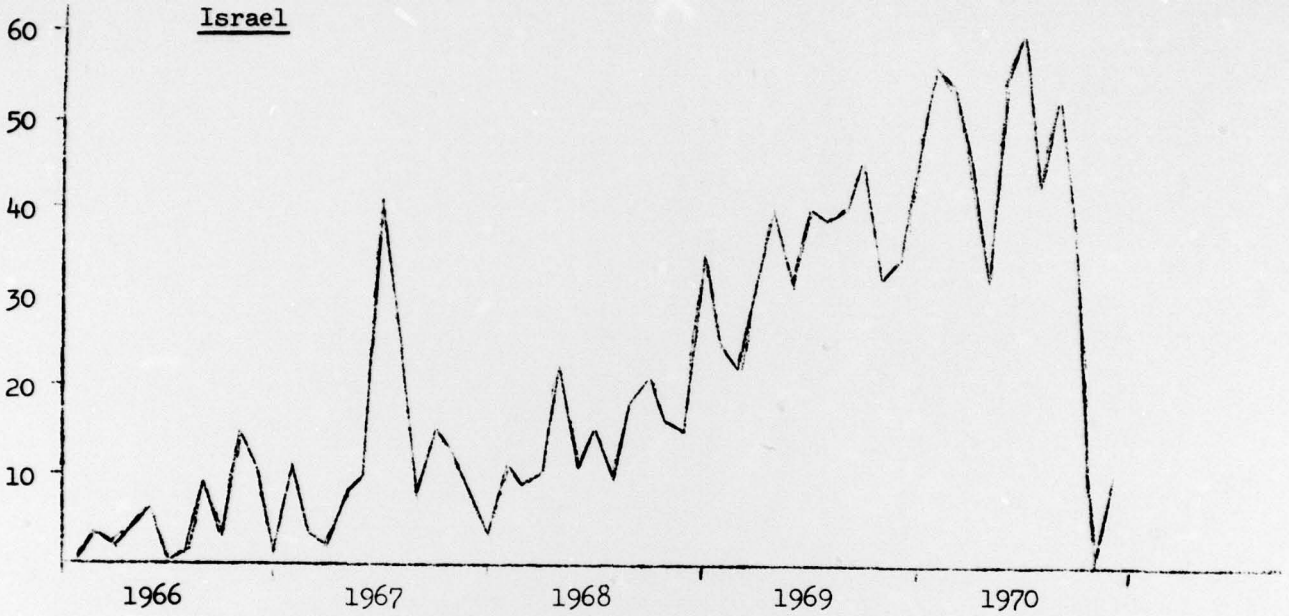


FIGURE 3
Conflictful Behavior
Originated by Israel and UAR



The deviations from past NATO receipt of total and conflictful interaction result from USA criticism of NATO-member financial contributions to the organization at the NATO meeting in Brussels. The South African deviation reflects interaction surrounding an economic aid agreement executed with Malagasy in November.

The above review of those countries exhibiting significant deviations from past behavior during the month of November provides additional indications of the feasibility of applying simple monitoring procedures to ongoing international interaction. The expansion of the procedure to include a monitoring of cooperative and conflictful behavior, accompanied by a more flexible arrangement of the data base to allow the derivation of performance parameters from varying time segments in the WEIS project data, seems to have increased the accuracy and the sensitivity of the indicators of changes taking place in international interaction. Additional indicators are continually being evaluated for inclusion into our monitoring procedure. Reader comments, criticisms, and suggestions for additional indicators to be included are solicited.

FOOTNOTES

1. Gary D. Hoggard, "Preliminary Report on a Procedure for Monitoring International Interaction," World Event/Interaction Survey, University of Southern California, November 15, 1970.
2. See references cited in the above report and the World Event/Interaction Program Plan for 1970-71 for a more complete outline of previous conflict and crisis interaction research and its relation to the WEIS research program.

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15 December 1970