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THE AZORES IN DIPLOMACY AND STRATEGY, 1940-1945

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The Portuguese Azores consist of nine volcanic islands strategically located in the central Atlantic, due west of the Iberian Peninsula.¹ On the same latitude as Washington D.C., the Islands are one third of the way from Lisbon to New York.² The strategic importance of these islands was demonstrated during the Yom Kipper War of 1973. When the United States decided to supply Israel during the latest Middle East conflict, only Portugal, among America's allies, offered the use of her territory in the logistical effort to replenish the Israeli army's depleted stocks of arms and war material. Cargo planes bound for Israel were allowed to refuel at the American air base in the islands.³ This base on Terceira was acquired by the United States during the Second World War.

→ This paper will examine the small but important part the Azores played in the conduct of World War II. In doing so, it will study the diplomacy surrounding the Anglo-American acquisition of military bases in the islands, their importance in the allied anti-submarine campaign and in the air ferry and transport service between the United States and the various theaters of the war. ~~It will show that a~~ less patient and more reckless manner in obtaining the bases would have damaged the military position of Great Britain and the United States in 1941, morally discredited the allied cause in 1943, and embittered relations between Portugal and the United States to the detriment of American postwar policy. ~~It will also indicate that the reasons for acquiring~~

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→ bases in the Azores during the war influenced the United States to retain them after the conflict. → p. 36

Both during and after World War II, the islands were intimately related to American security needs. At first American policy makers saw the islands as important to the defense of the Western Hemisphere and the prosecution of the war, but then increasingly in relation to the exercise of American influence for peace and security beyond the Atlantic in the postwar period. To gain these strategic bases the United States paid a price: it undertook to respect Portuguese sovereignty in all the Portuguese colonies. This promise has had important implications for American foreign policy towards Africa. For example, while President Kennedy was committed to an anti-colonialist policy, the importance of the Azores base to American security forced him to moderate his position vis a vis Portuguese colonies in Africa. Thus U.S. anti-colonialist policy was never strong enough for African Nationalists,⁴ and has hindered Washington's ability to compete with the Soviets for influence in black Africa after the fall of the Portuguese empire.

While the Azores have played a significant role in strategy and diplomacy after World War II, this paper will concentrate on the wartime events leading to the American acquisition of bases in the islands. The first part of the study will focus on the Anglo-American fears of a German occupation of the Azores; the second, on the allied effort to secure the islands as a base for the offensive against German submarines and for air ferry and trans-

port service to the war's numerous theaters; the third, on the American effort to obtain bases for the exclusive use of the United States; and finally, concluding remarks on the importance of the Azores in wartime diplomacy and American postwar policy.

* * * *

The Second World War placed a great strain on Europe's oldest alliance -- the one between Portugal and Great Britain. In their wars the English rarely invoked the alliance of 1373 because a weak Portugal, requiring military aid, would add little to and detract much from British strength. Thus, with the onset of war in Europe in September, 1939, Portugal adopted an attitude of benevolent neutrality towards her historic ally, Great Britain. However, after the German war machine ground up allied forces in France in the spring of 1940, Antonio de Oliveira Salazar, the dictator Premier of Portugal, began to doubt Britain's ability to protect his country and thus adopted a policy of strict, if nervous, neutrality towards the combatants.⁵

A certain degree of apprehension on Salazar's part was fully justified. The Portuguese Atlantic islands including the Azores and the Cape Verdes and to a lesser extent the Spanish Canaries became a focus of attention for the British, Americans, and Germans.

As early as June 20, 1940, the German naval staff expressed an interest in acquiring bases in the Azores, the Canaries, or the Cape Verde islands. A July staff study maintained America's interest in the survival of Britain would render the United States

hostile to Germany. It concluded that the two "Anglo-American powers" were "the next natural enemies with which Germany will have to deal." Therefore the Reich would have to secure its economic and strategic sea communications in the Atlantic and disrupt those of the enemy.⁶

On the American side, the consequences of a German victory on the continent were discussed as early as September, 1939. President Franklin D. Roosevelt and Assistant Secretary of State A.A. Berle agreed that if Germany won the war, Hitler would attempt to gain the Azores and Cape Verde Islands as bases for operations against the Americas.⁷ After the collapse of France, American authorities were keenly aware of the strategic importance of the Cape Verde Islands between the bulges of West Africa and Brazil and were as much concerned about the Azores as they were about Greenland and Iceland.⁸

On September 25, 1940, Brigadier General George V. Strong, Chief of the War Plans Division of the Army General Staff, advocated the occupation of all Atlantic outposts from Bahia to Greenland within three months of the loss of the British fleet. Furthermore, the United States should be ready at any time to occupy preventively the French colonial city of Dakar on the African bulge and the Azores in the central Atlantic even before the loss of the British fleet in order to safeguard American security. However, the military, at this time would have been unable to implement all or any of these measures because of lack of troops and supplies.⁹

The British, on the other hand, were prepared to prevent a German coup de main in the Atlantic Islands. The Axis armistice with France had greatly increased the strategic importance of Spain and Portugal. Gibraltar was now exposed to a German thrust through fascist Spain. As a result, Portugal might fall under Axis domination. In that event, British military leaders were convinced that the Azores were too strategically important to be allowed to fall into German hands. They lay athwart British trade routes and contained British cable stations. A Nazi occupation of the islands would have had a serious impact on British shipping and communications. Therefore, the Imperial General Staff wanted to occupy the islands if Portugal were attacked or if Spain showed signs of entering the war.¹⁰

The British Foreign Office was particularly anxious that action should not be taken unless it was quite clear that an occupation was necessary to prevent a German takeover. Precipitate action would turn Spanish and Portuguese opinion to the German side. While Prime Minister Winston S. Churchill favored a preemptive occupation, the British service chiefs realized that seizure of the islands might expose the Portuguese mainland to an attack by Spain and that Britain could not give Portugal any direct aid.¹¹ On July 22, 1940, the British Cabinet agreed that the Azores and Cape Verde Islands should be seized only if it became clear beyond a reasonable doubt that Portugal or Spain intended to collaborate with the Axis powers against Britain.¹² Two compo-

site brigades of Royal Marines were to be held in readiness in the event circumstances made the operation necessary.¹³

As German interest in the Iberian Peninsula grew such an operation seemed more and more likely. On September 6 Admiral Erich Raeder, Commander-in-Chief of the German Navy, suggested action against the British in the Mediterranean in lieu of a difficult and dangerous operation against the British Isles. The Fuehrer agreed with Raeder's argument, saying

Britain should be excluded from the Mediterranean. Control of the Mediterranean area is of vital importance in Southeastern Europe, Asia Minor, Arabia, Egypt, and the African area. Unlimited sources for raw materials would be guaranteed. New and strategically favorable bases for further operations against the British Empire would be won. The loss of Gibraltar would mean crucial difficulties for British import traffic from the South Atlantic. Preparations for this operation must be begun at once before the USA steps in. It should not be considered of secondary importance, but as one of the main blows against Britain.¹⁴

Since there was a danger that the British or Americans might occupy the Azores or Canary Islands if Spain or Portugal entered the war, the Fuehrer felt that the Canaries should be secured by the Luftwaffe in conjunction with an operation against Gibraltar.¹⁵

On November 12 Hitler issued the directive for Operation Felix which envisioned a German intervention in the Iberian Peninsula with the purpose of driving the English out of the Western Mediterranean. To secure this objective the Wehrmacht was ordered to take Gibraltar and close the Straits. The directive further stipulated that the "English should be prevented from gaining a

foothold at another point of the Iberian Peninsula or of the Atlantic islands."¹⁶ Operation Felix would not be undertaken until the conclusion of preparations regarding the Atlantic islands. Plans for securing the Canaries and Cape Verdes were to be drawn up. Hitler personally requested an "examination of the question of occupation of Madeira and of the Azores as well as of the advantages and disadvantages which would ensue for the naval and aerial conduct of the war."¹⁷

Two days later Hitler again discussed the question of occupying the Azores in a conference with Raeder. The Admiral argued that Portuguese neutrality was valuable to Germany:

Portugal will maintain neutrality, since she knows that we could drive the British out of Portugal from Spain. Any breach of Portugal's neutrality by us would have a very unfavorable effect on public opinion in the U.S.A., Brazil, and in South America generally, but above all it would result in the immediate occupation of the Azores, perhaps also of the Cape Verde Islands and of Angola, by Britain or the U.S.A.¹⁸

Hitler disagreed and correctly perceived that the British would occupy the Azores immediately upon German entry into Spain. The Fuehrer also maintained that "the Azores would afford him the only facility for attacking America, if she should enter the war, with a modern plan of the Messerschmidt type...." Thereby America would be forced to build up her own anti-aircraft defense, which is still completely lacking, instead of assisting Britain."¹⁹

Raeder replied that the occupation of the Azores would be a risky operation but one which could succeed with luck. But he did not think they could be held in face of the inevitable British

counterattack carried out, perhaps with American help. In addition, German naval forces including submarines would be preoccupied with supplying Nazi forces in the islands. This would adversely affect the campaign against British shipping. Raeder recommended instead that the Portuguese should be influenced to fortify the Azores and defend them. He also considered the occupation of the Cape Verdes and Madeira as unnecessary since they did not afford a useful base for either the Germans or the British. But German troops should supplement the Spanish garrison in the Canaries which the British would certainly covet after they lost Gibraltar. Hitler was not dissuaded. He ordered immediate investigations by the navy and the air force of possible plans for the occupation of the Azores.²⁰

London was only too well aware of the German threat to Gibraltar and the Atlantic Islands. The British high command kept sufficient troops, planes, and ships in readiness to parry any Axis thrust in those directions. Lieutenant General Sir Clive Liddell, the British commander at Gibraltar, was granted his request for six months supplies in anticipation of an extended siege. However, since the need for an alternative to Gibraltar was so great, the British were prepared to occupy immediately some of the Atlantic Islands with or without the consent of the Iberian governments as soon as the Germans invaded the peninsula.²¹

Late in 1940 the question of preventive occupation again arose. In October, Vice-Admiral Sir James Somerville, the commander of the British squadron at Gibraltar, was ordered to

to keep a watch on the Atlantic islands. Thenceforth a cruiser generally patrolled in the neighborhood of the Azores.²² Nevertheless, it was difficult to maintain an effective watch. The British Chiefs of Staff feared that a German expedition from French or Scandinavian ports might pounce on the islands at any time. Therefore, they consulted the Foreign Office concerning a preemptive occupation.²³ The Foreign Office in turn contacted Sir Samuel Hoare, the Ambassador to Spain, who replied on the night of December 3-4 that the Spanish Government would regard such an action as an attack on the Iberian Peninsula and that Spain would enter the war on the side of the Axis. In that event, Spain would invite the Germans into the peninsula and the Wehrmacht would certainly occupy Portugal. Thus precipitate action concerning the Azores would destroy growing Spanish resistance to German pressure to enter the war. With the warning, the question of preventive occupation again subsided.²⁴

While Generalissimo Francisco Franco had received aid from Germany and Italy during the Spanish Civil War, he was reluctant to involve his country in another protracted conflict. After the German successes in France, he did switch from a state of neutrality to one of non-belligerency. He also selected his brother-in-law Serrano Suner, a pro-German, to head the Foreign Ministry. On October 17, 1940, in a meeting with Hitler at Hendaye, Franco gave the Fuehrer vague assurances of an eventual Spanish entry into the war. On November 4th, Spain seized the international zone around Tangier.²⁵

Since the British had not provoked him, Franco would go no further. Behind his polite refusal to support Hitler's plans were many factors: the internal divisions still unmelded from the Civil War, Franco's uncertain control of his own political organization, Spain's unstable economic situation, and the possible English reaction against Spanish possessions like the Canary or Balearic Islands.²⁶ Furthermore, British successes against the Italians in North Africa must have persuaded the Caudillo that the outcome of the war was by no means certain.²⁷ It is also worth noting that Salazar continually cautioned both the Spanish and the Germans that the economic well-being of Spain depended on England continuing her food shipments.²⁸

Since Operation Felix had been contingent upon Spanish approval of German operations in Iberia, Franco's reluctance to commit himself to the Axis cause effectively frustrated Hitler's designs in the peninsula. On December 11 the Fuehrer postponed the campaign.²⁹ German attention was drawn to the Eastern Mediterranean where the Italians were suffering significant defeats at the hands of the Greeks and the British. Hitler was now forced to deal with this situation.³⁰ On January 10 the Gibraltar campaign was postponed indefinitely.³¹

In December, 1940, the Nazi threat to Iberia had prompted the Portuguese to request military staff talks with the British. Now the British were less concerned. Churchill recognized the unlikelihood that Spain would give permission to Hitler to attack Gib-

raltar and relaxed the alert of forces held in readiness to seize the Azores in such an event. In February, 1941, a Portuguese military mission arrived in London and refused any aid or assistance unless their territory were actually invaded (when, in fact, there would not be enough time to send troops). The British Government responded by advising their allies to make only a token resistance to a German attack on the mainland and to move their Government to the Azores. Salazar accepted this advice and began to reinforce the islands.³²

British reverses in the Balkans and North Africa in April, 1941, revived London's fears concerning Gibraltar and the Atlantic islands and led them to seek American help. London had kept Washington informed of British plans concerning those areas since September, 1940. On April 23, 1941, Churchill informed Roosevelt that "the capacity of Spain and Portugal to resist the increasing German pressure may at any time collapse, and the anchorage at Gibraltar be rendered unusable."³³ While Britain was prepared to seize the Azores and the Cape Verdes in such an event, these operations would take eight days, and in that time the Germans might overrun the islands. He went on:

With our other naval burdens we have not the forces to maintain a continuous watch. It would be a very great advantage if you could send an American squadron for a friendly cruise in these regions at the earliest moment. This would probably warn Nazi raiders off, and would keep the place warm for us as well as giving us valuable information.³⁴

The United States responded by proposing to the Portuguese Government a "friendly" naval visit to the Azores and the Cape Verde

islands, but the Portuguese did not welcome the idea and the Americans dropped it.³⁵

American concern for the Atlantic islands was now increasing. German propaganda expressing real fears concerning a British or American occupation of the Azores was interpreted in Washington as a prelude to a German operation against the islands.³⁶ Since the islands in Axis hands would bring the Germans one thousand miles closer to the United States, there was some sentiment to occupy them. On May 6, Senator Claude Pepper of Florida urged the government to occupy the "points of vantage from which these monsters were preparing to strike at us." The Senator included the Azores among those "points of vantage."³⁷ Following the quick conquests of Yugoslavia and Greece, it seemed logical for the Germans to attempt to complete the process by driving the British from the Western Mediterranean.³⁸ This meant a German threat to Iberia and North Africa. Roosevelt was particularly concerned about the effect of these developments on the Portuguese and Spanish islands in the Atlantic.³⁹ News of the Bismarck's break into the Atlantic galvanized these fears and caused the White House to take action.⁴⁰

On May 22 Roosevelt ordered preparations for an expedition to the Azores in one month's time. The President reasoned that "it was in the interest of the United States to prevent non-American belligerent forces from gaining control of the islands and to hold them for use as air and naval bases for the defense of the Western Hemisphere."⁴¹

In a radio address on May 27, Roosevelt declared a state of unlimited national emergency. The Chief Executive asserted that

Unless the advance of Hitlerism is forceably checked now, the Western Hemisphere will be within range of the Nazi weapons of destruction ... Equally, the Azores and the Cape Verde islands, if occupied or controlled by Germany, would directly endanger the freedom of the Atlantic and our own American physical safety ... Old fashioned common sense calls for the use of strategy that will prevent such an enemy from gaining a foothold in the first place.⁴²

Ironically, on the same day Roosevelt ordered the occupation of the Azores, Admiral Raeder finally convinced Hitler to abandon his plans for using facilities in the islands to intimidate the United States with the threat of long-range bomber attacks.⁴³

However, American military leaders were no more enthusiastic than Admiral Raeder concerning an occupation of the Azores. While the latest plan for coalition warfare, Rainbow 5, envisioned the seizure of the islands, the war planners did not believe the United States was yet strong enough to undertake such a dangerous operation. The army argued that the islands, once occupied, would be hard to defend against enemy air power based in France or on the Iberian Peninsula. Besides, the British had assigned forces to take the islands if Germany entered Spain. Furthermore, legislation restricted the use of troops outside the Western Hemisphere. The logistical problems the operation presented were also formidable. There were only twenty-six vessels in the Army Transport Service, all in full use. Nevertheless, the President had ordered the operation to commence on June 22, and the army prepared. The First Division and the First Marine Division compris-

ing some 28,000 men were assigned the task, with a reserve force of 11,000. Logistical support in critically short supply was allocated. America's most ambitious project in the undeclared war to date was to be under the overall command of the Navy.⁴⁴

Once again, international developments halted an intervention. The Portuguese Government had vigorously protested Senator Pepper's speech of May 6. Joao Antonio de Bianchi, Lisbon's Minister in Washington, informed the State Department that the Portuguese had taken measures for the defense of their possessions in the Atlantic not only as an assertion of sovereignty but also with the intention of resisting any attack that might be directed against them. Secretary of State Cordell Hull told the Portuguese that the Senator spoke for himself and not for the Government of the United States. However, while the Secretary professed a desire to maintain friendly relations with Portugal, he carefully avoided committing the United States to any course of action or inaction concerning the islands.⁴⁵

The Portuguese reaction to the President's address of May 27 was swift and uncompromising. In a note to the State Department, the Portuguese maintained that their country had taken a neutral position in the present war and that Great Britain, Portugal's ally had approved this policy. "This neutrality," the note read:

has been ... [strictly] observed and has provided Europe and the two Americas with their last direct contact From their own part the Portuguese Government reassert their ... determination to defend to the limit of their forces, their neutrality and their sovereign rights against all and any attack to which they may be exposed, though continuing to state they do not anticipated any such event.⁴⁶

In a conversation of May 31, Bianchi warned Hull that "the utterances of the President might be availed of by Germany as an excuse for seizing the Azores and the Cape Verdes for herself, or what would be a terrific blow to his country, to seize and occupy Portugal."⁴⁷

The Portuguese had a legitimate right to fear the consequences of an American or British occupation of their Atlantic islands. The German High Command on May 7 determined to occupy the Iberian Peninsula if the British should create a front in the peninsula while Germany was involved in war with the Soviet Union.⁴⁸ On May 12 Eberhard von Strohrer, the German Ambassador sought and received assurance from Serrano Suner, the Spanish Foreign Minister, that Spain would march into Portugal if the Azores were occupied by the English or the Americans.⁴⁹ In a conference with Admiral Raeder on June 25 Hitler decided to send a Panzer and infantry divisions into Iberia and French North Africa as soon as the United States occupied the Portuguese or Spanish islands.⁵⁰

To the surprise of the State Department, the British were no less averse to an American move. While they would have been happy to include a token American force in an English occupation of the

islands, they were sensitive to Portuguese opinion which was "rather nervous regarding American and British intentions." The British, therefore, preferred to take the lead in negotiations with Salazar concerning the islands while holding "American influence in reserve for the moment."⁵¹

In the face of this opposition, Roosevelt gave way. On June 6, he cancelled the Azores expedition in favor of an American occupation of Iceland. This would release British troops for use elsewhere. The imminent Nazi invasion of Russia and the Portuguese determination to defend her Atlantic possessions made the Azores expedition unnecessary. Furthermore, an American occupation of the Azores in face of Portuguese protestations would have had a very bad effect on American relations in Latin America. In addition, Churchill was much more anxious to secure American aid in Iceland than in the Azores.⁵²

However, army planners were no more enthusiastic concerning Iceland than they were concerning the Azores. The army was quite conscious of its weakness and unreadiness for combat. But if an operation had to be undertaken the army would have preferred to occupy the Azores rather than Iceland. The first was more in keeping with a policy of static defense in the Western Hemisphere than the second. Nevertheless, the army undertook preparations for the relief of British troops in Iceland even though they considered it a dangerous political move which might entail an engagement with German forces. However, when Roosevelt suggested on June 19, the creation of a force of 75,000 men for action in

several quarters simultaneously -- Iceland, the Azores and the Cape Verde Islands, General George C. Marshall bluntly told the President that "he would not give his consent to the dispatch of any troops outside the United States that were not completely trained and equipped to meet a first class enemy." Marshall's objections effectively ended any lingering thoughts the President may have had concerning a simultaneous occupation of Iceland and the Azores. Only Iceland was to be occupied in the summer of 1941.⁵³

With the Azores question settled for the time being, the United States sought to allay Portuguese suspicions and restore friendly relations. On July 14 President Roosevelt personally wrote premier Salazar assuring him that

the continued exercise of unimpaired and sovereign jurisdiction by the Government of Portugal over the territory of Portugal itself, over the Azores and over all Portuguese colonies offers complete assurance of security to the Western Hemisphere insofar as the regions mentioned are concerned.⁵⁴

However, Roosevelt offered American assistance alone or in association with Brazil, Portugal's kinder state, in defending Portuguese sovereignty over the Azores against any threat of aggression only if Portugal should express "its belief that such aggression is imminent or its desire that such steps be taken."⁵⁵ The President's letter had its desired effect and Salazar responded warmly with assurances that while he did not share the President's fears concerning a German attack he would call upon American aid in such an event if Great Britain, Portugal's historic ally, were

unable to supply any assistance. Salazar maintained that the President's "desire that the relations between our two countries and the two Governments should always be firm in friendship and that no misunderstanding should disturb them coincides with our own most vehement wish."⁵⁶

* * * *

While the great German victories on the Eastern Front revived at times Anglo-American fears concerning German designs on Iberia, Northwest Africa, and the Atlantic Islands, all attempts at giving new life to the Azores project failed. Then America's entrance into the war transformed the character of the struggle and not so surprisingly allied attitudes towards the Azores. Gradually, the islands were no longer seen as potential bases for the enemy which had to be defended at all costs but as bastions from which the allies could prosecute the war. As the war progressed and as the German threat to Iberia receded, the United States and Great Britain became less interested in denying the islands to the Germans and more interested in acquiring them for their own use. In 1943 the Atlantic allies determined to gain the islands through negotiation or, if necessary, by force.

At the two Washington Conferences of 1941 and 1942, President Roosevelt, Prime Minister Churchill and the Combined Chiefs of Staff debated various ways of waging the war against Germany. Possible operations in North Africa, France, and Iberia were discussed. Plans for expeditions to the Portuguese Azores and Cape Verde Islands and the Spanish Canaries were considered separately

or in conjunction with larger operations in North Africa or Iberia. However, American strength was still maturing and this fact severely limited the options of the allies. Furthermore, a lack of shipping hindered operations until the later stages of the conflict. As Admiral King succinctly put it, "We cannot do all these things."⁵⁷ All that could be managed by late 1942 was an allied campaign in North Africa.

In 1943, as American strength came to bear and as the United Nations moved increasingly to the offensive, the Allies began to covet bases in the Azores from which the anti-submarine campaign could be pursued. The successful prosecution of the war depended on securing the Atlantic trade routes and protecting allied merchant shipping from the depredations of German submarines. Until March, 1943, the German sinking of allied shipping had been increasing steadily. In 1940 and 1941, respectively, 3,990,000 and 4,300,000 tons of shipping were lost. America's entrance into the war raised the figure to 7,800,000 tons for 1942. Over the same period more U-boats were launched than were destroyed. In January, 1943, there were 212 submarines and in March, 250. The sinkings in January and February had been very serious and the threat to survival was very real.⁵⁸

In this tense situation allied countermeasures began to take effect. The airplane had proved to be a very efficient weapon against the submarine. Towards the end of 1942 the air coverage over trans-Atlantic convoys was gradually extended until the allied air forces were able to patrol an area extending four

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hundred miles east of Newfoundland, five hundred miles south of Iceland, and seven hundred miles west of the British Isles.⁵⁹ As a result of these measures the U-boat toll on allied shipping lessened and the cost to the Germans in submarines destroyed increased.

However, the Central Atlantic was a "big black pit" lacking bases for air search.⁶⁰ While escort carriers could provide some air coverage in this area, the allied admirals felt they needed permanent bases in the Azores. At the Trident Conference in May, 1943, the Combined Chiefs of Staff came to the following conclusion:

In order to maintain maximum air protection at the present time it is necessary for the US-UK convoys to follow a northerly route which not only suffers from the disadvantages of bad weather and ice, but which inevitably becomes known to the enemy. If we take the southerly route at the present time, we lose shore-based air protection over a large part of the passage. There is further peril of U-boat concentration against the U.S.-Mediterranean convoys. We regard the immediate occupation of the Azores as imperative to conserve lives and shipping and, above all, to shorten the War.⁶²

The Combined Chiefs required facilities on Terceira for operating very long-range aircraft and unrestricted fueling facilities for naval escorts at the islands of San Miguel or Fayal. Among the benefits to be derived from these bases were: greater scope for evasive routing; centrally located air protection useful in the anti-submarine campaign in both the North Atlantic and Mediterranean theaters; increased carrying capacity for merchant shipping using a more direct route across the middle Atlantic; fuelling facilities for surface escorts; and direct all-weather air supply

routes from the United States to Europe, Africa, and the Far East.⁶²

It was this last benefit -- the direct all-weather air supply route -- which would pose the greatest problem in American dealings with Portugal and Great Britain in the Azores' negotiations. As early as 1941 Colonel Robert Olds of the Ferrying Command suggested the Azores as an alternate route for the movement of aircraft, engine spares, and supplies to Britain during the winter. The North African campaign a year later gave the Azores an even greater strategic importance, since they could provide the most direct air route for support of the North African expedition and a shorter airway to the Middle East, India, and China. In addition, General George of the Air Transport Command had the foresight to realize that a base in the Azores would be essential to the support of future military operations on the continent. Following the example of Colonel Olds, General Harold George pressured his superior, air force chief General H.H. Arnold, and through him the State Department to gain air transport rights in the Azores.⁶³

As a result, the State Department in April, 1943, prompted Pan American Airways to initiate negotiations with the Portuguese to gain commercial air rights in the islands. This was a ploy designed to secure immediate improvement of the air facilities on Terceira, to explore possibilities of construction of new facilities on Santa Maria, and to open the door to eventual military use of these new and improved facilities. While the Department realized that a direct landplane route from the United States to North

Africa, the Mediterranean, the Middle and Far East had postwar connotations, they were willing if necessary, to confine the operation of this route to the duration of the war. In August, 1943, the Pan American talks were discontinued so as not to interfere with the British effort to obtain allied rights in the islands undertaken subsequent to the Trident Conference.⁶⁴

Soon after the Pan American negotiations were initiated, the President, Prime Minister, and the Combined Chiefs of Staff met in Washington in May, 1943. It has been noted that at this Trident Conference, the Combined Chiefs of Staff agreed on the necessity of acquiring facilities in the Azores for the anti-submarine campaign and the air ferry service. But the manner in which these bases were to be acquired was a matter of extensive and vigorous debate.

The allied successes in North Africa in late 1942 and 1943 greatly reduced the chances of a German occupation of Iberia in retaliation against an allied seizure of the Azores. Indeed, Hitler on May 14, 1943, vetoed Admiral Karl Doenitz's proposal to regain the initiative in the Mediterranean by occupying Spain and Gibraltar to outflank the Anglo-American offensive. The Fuehrer stated that "the Axis must face the fact that it is saddled with [the defense of] Italy."⁶⁵ Therefore, a German threat to Iberia no longer restrained the allies in their dealings with Portugal. Indeed as early as October, 1942, the United States and Great

Britain considered the possibility of occupying the Azores by force.⁶⁶ When the Combined Chiefs presented their views concerning the islands at a meeting on May 19 with Roosevelt and Churchill, there was considerable support for obtaining them by force majeure. Churchill argued that the Portuguese would never consent to grant the bases because such an action would violate their neutrality and that therefore nothing could be gained by a diplomatic approach.⁶⁷ There was little disagreement on the American side. Harry Hopkins "thought the chances of the Portuguese willingly conceding the use of bases in the Azores were remote."⁶⁸ At previous meetings of the Combined Chiefs, General Marshall and Admirals Ernest J. King and William D. Leahy had committed themselves to such a view.⁶⁹ While Roosevelt suggested an approach through Brazil, he did not raise any objections to using force to obtain the islands.⁷⁰

When Churchill cabled London seeking Cabinet approval for a forceful occupation of the Azores, Foreign Minister Anthony Eden and Deputy Prime Minister Clement Attlee made known their objections to the proposal in a telegram on May 21.⁷¹ Churchill had argued that he did not see any moral substance in the objection to overriding Portuguese neutrality, since the fate of these small nations depended on an allied victory.⁷² Attlee and Eden replied that it would be better to try the diplomatic approach first since such an operation could not take place for two months at the earliest and since the British Ambassador to Lisbon believed such an effort might succeed. They concluded that it would be wise to

make an appeal based on the alliance with Portugal. If this should fail, they would be in a better moral position to seize the territory of a faithless ally.⁷³

While the conference approved preparations for a British occupation of the islands, it deferred a decision since the British Cabinet had withheld its endorsement of the operation.⁷⁴ Upon returning to London, Churchill reopened the debate, but Eden won it when the British Chiefs expressed reservations concerning the availability of shipping and escorts for the expedition.⁷⁵

Now the British tried the diplomatic approach. With American approval, Eden broached the subject on June 18, to Senor Monteiro, the Portuguese Ambassador, with whom Eden enjoyed a close relationship.⁷⁶ Meanwhile, Sir Ronald Campbell, the British Ambassador, approached Salazar in Lisbon.⁷⁷ The Portuguese response was favorable. The Anglo-Portuguese alliance dated from 1373, and its maintenance was a traditional tenet of Portuguese foreign policy. With the German and Spanish menace somewhat diminished in Portuguese eyes, Salazar felt that an outright refusal to honor the alliance was unthinkable.⁷⁸ Convinced that the allies would eventually win the war and that the Portuguese Empire would be dependent on sea lanes dominated by Britain and America in the postwar period, the wily Premier was determined to exploit Portugal's favorable bargaining position to gain allied guarantees of Portuguese colonial possessions.

However, to limit the risks implicit in such a policy Salazar hoped to maintain his country's neutrality by allowing only the

British facilities in the Azores. Since Germany depended on Portugal for supplies of wolfram, it is reasonable to assume that Salazar trusted Hitler would accept his arguments that the bases were granted to the British under terms of an alliance that predated the present conflict. Even so, the Portuguese Premier feared possible air attacks on Portuguese cities and U-boat sinkings of Portuguese shipping. He was also uncertain about the Spanish response to such an agreement. Therefore, he requested and received anti-aircraft guns and equipment for three divisions. Certain economic concessions were also granted.⁷⁹

On August 18 the British and Portuguese signed an agreement granting Britain naval facilities at the port of Horta and air rights at Lagens Field on Terceira. The British were allowed to occupy these facilities on October 8. In return the British promised to withdraw all troops upon the cessation of hostilities and to guarantee Portuguese sovereignty over all Portuguese colonies.⁸⁰

* * * *

The Azores figures prominently in the postwar planning of an America which envisioned an Atlantic safe for her democracy, the abandonment of the unsuccessful, pre-war policy of isolationism, and the pursuit of an active role in world affairs. At the Teheran Conference in late 1943, President Roosevelt proposed to Prime Minister Churchill and Marshal Joseph Stalin the maintenance of postwar peace and security through the cooperation of the "Four Policemen" -- the United States, Great Britain, the Soviet Union,

and China -- who would control strategic bases around the world. Significantly, the United States did not object to the Russian assumption that the Atlantic would be under American control nor to the Soviet suggestion that Azores should be an American "strong point." Clearly it was with this idea in mind that American war leaders had extracted at the Trident Conference a British promise that "land, air, and sea facilities [in the islands] would be available to all United Nations forces."⁸¹ To fulfill its role as a world policeman, Roosevelt envisioned the dispatch of American ships and aircraft to distant trouble spots. The other "Police-men" would supply land troops since domestic political considerations ruled out the use of American soldiers. The Joint Chiefs required postwar military supply privileges and related commercial rights in the Azores in order to keep the Atlantic peace and to logistically support outlying military posts in Europe, North Africa, and the Middle East. Thus, the Azores were to be one of the key bases in a network of strong points enabling the United States to exercise its power and influence for world peace and security.⁸²

While these postwar considerations influenced American policy concerning the Azores, the immediate strategic situation was the predominant American concern. Since only the United States could extend Lages Field for the operation of long range planes, the Navy was anxious to have an American naval squadron included in anti-submarine operations undertaken from the Azores.⁸³ Further-

more, it has been noted that the Air Transport Command required facilities in the Azores in order to save fuel and time and to minimize operational damage in the movement of planes and air cargo to the war's various theaters.

Therefore, when Churchill informed Roosevelt that the Portuguese were objecting to an American presence in the islands, there was an adverse reaction in Washington. Hull cabled Ambassador John G. Winant to advise the British Government that he realized "the delicacy of the conversations now in progress but any agreement restricting facilities in [the Azores] to British aircraft is unacceptable to this country and would not be in harmony with the Trident Agreement."⁸⁴ Naturally, the exclusion of the United States from the Azores by the subsequent Anglo-Portuguese Agreement embittered official Washington. However, at the Quadrant Conference in late August the British assuaged American feelings by promising to secure air facilities for the United States after they acquired a foothold in the islands.⁸⁵ It was also agreed that a mixed Anglo-American convoy including naval escorts and air support units would visit the islands soon after the British occupation on October 8. This would be the first step in gaining American use of the bases.⁸⁶

At first American efforts to negotiate with the Portuguese only led to confusion and misunderstanding. Prior to the Anglo-Portuguese accord, Eden had repeatedly requested that the United States associate itself with Great Britain in its guarantee of the Portuguese colonies. The August agreement between London and

Lisbon greatly diminished the immediate need for an American guarantee. Nevertheless, on October 8 Cordell Hull belatedly authorized the Charge d'Affaires in Lisbon, George F. Kennan, to advise the Portuguese Government, that the United States agreed to "respect Portuguese sovereignty in all Portuguese colonies." However, Churchill, in a letter to Roosevelt, suggested that the guarantee be withheld for use as a guid pro quo in the negotiations to secure American access to the Azores. Hull complied, cabling Kennan to withhold the guarantee. Unfortunately, Kennan in securing an interview with Salazar had intimated that it would concern the matter of the guarantee. Hull's telegram put the Charge in a difficult situation. He was forced to tell Salazar that he had received instructions which made it unnecessary and difficult for him to discuss the matter for which he had arranged the interview. This whole episode aroused Portuguese suspicions of American intentions regarding the Azores.⁸⁷

On October 16, Roosevelt instructed Kennan to ask Salazar to grant certain facilities in the Azores to the American Army and Navy. The facilities Roosevelt requested included a naval base, a seaplane facility, bases for landbased aircraft on three different islands, cable and communications systems, radar and observation posts. This list was a good deal more than the British had been able to obtain. Kennan did not believe that Salazar would grant these facilities because the Premier felt that he had already fulfilled the terms of the Anglo-Portuguese alliance at considerable risk to his country. The British presence in the islands had

drawn ominous protests from Germany. If Salazar granted these facilities to the Americans, he would in effect be abandoning his nominal neutrality which might provoke a German or Spanish attack. Furthermore, the Charge believe that he had little to offer Salazar in return for incurring such a risk.⁸⁸

Kennan, seeking an appointment with the Premier to discuss the matter, was reminded by the Portuguese Foreign Office of the results of the last interview and was given to understand that he would not be received unless the guarantee were given. The young Charge violating his written instructions sent the Portuguese Foreign Office a note committing the United States to respecting Portuguese sovereignty in all her colonies. Upon returning to the United States for consultations, he presented his case to the President. Apprised of the difficulties, Roosevelt gave the Charge a free hand in negotiating for the bases. To allay Portuguese fears he asked Kennan to deliver a letter to Salazar in which the President assured the Premier that United States would evacuate and return to the Portuguese after the war any facilities in the islands which they might grant for American use.⁸⁹

Roosevelt's letter and Kennan's guarantee reassured the Portuguese and negotiations proceeded favorably. The failure of the Germans or the Spanish to undertake military action after the British occupation of the islands also encouraged Salazar. Furthermore, the British supported the discussions by referring to the "Friends of Friends" provision of the Treaty of 1373 which made an ally of England an ally of Portugal. On December 2, R.

Henry Norweb, who had been sent to Portugal as the new minister in order to raise the level of America's diplomatic representation in Lisbon, informed Washington that the Portuguese had granted the United States "immediate use of existing British facilities." The facilities were provided on the condition of maintaining an appearance of compliance with the British agreement. However, Salazar was unwilling to grant additional installations to Britain or the United States until the general military situation had diminished the danger from Germany.⁹⁰

Soon, the Azores facilities began making their contribution to the war effort. In October, R.A.F. aircraft including 30 B-17's and 9 Hudsons were operating from the islands.⁹¹ The Azores saw the first Anglo-American convoy in November.⁹² The first American bomber ferried through the Azores landed at Lagens Field on December 9, only a week after the agreement. Within two weeks a plan for transport operations through the Azores to both the United Kingdom and North Africa was drawn and flights were begun on December 29. In February, 1944, the Ferrying Division inaugurated the CRESCENT transport service from Wilmington, Delaware, to the Azores and ultimately over the "Hump" to China. With the subsequent decline in the submarine menace in the area, ship traffic increased to Casablanca from where supplies were flown to Italy and China.⁹³

Nevertheless, existing facilities were far short of what the military had demanded. Admiral Leahy thought the British could have been more helpful.⁹⁴ General Marshall believed that the real

source of the trouble had been the lack of energetic representation in Lisbon.⁹⁵ With the increasing tempo in the war and the consequent demand for planes and supplies, the Joint Chiefs were anxious to increase the flow of traffic through the Azores by expanding existing facilities and by constructing an additional air base on Santa Maria Island.⁹⁶

Prompted by the War Department, Hull instructed Norweb to renew negotiations.⁹⁷ On December 31, 1943, the Portuguese agreed to allow American personnel to aid the British in expanding Lagens Field. They also agreed to permit an American airfield survey party, disguised as employees of Pan American Airways, to seek a suitable site for the Santa Maria base.⁹⁸ However, Salazar would not go beyond these concessions. On January 13 the Navy's request to include an American squadron in the Azores operations was denied because it was beyond the scope of the Anglo-Portuguese Agreement.⁹⁹ The negotiations for an additional base on Santa Maria dragged on for months. The War Department was becoming impatient.

On May 17, the Joint Chiefs complained that Lagens Field was too small and too crowded to handle the projected operations of the Air Transport Command which called for 1,350 landings monthly by September, 1944, and 2,100 by January, 1945. They claimed that even if the struggle should end in Europe before the field were completed the Azores would continue to be valuable in waging the war in the Far East. "The shortest and fastest channel to the Far

East will continue to be provided by the Central Atlantic route,"¹⁰⁰ stated the Chiefs.

To induce Salazar to authorize construction of a second airfield, the State Department promised favorable consideration of the Portuguese request to participate in the liberation of Timor.¹⁰¹ Timor, an island north of Australia, had been governed by Portugal and the Netherlands prior to the Pacific war. With the outbreak of the Far Eastern conflict, the Japanese occupied the Portuguese half of the island as well as the Dutch half after an Austral-Dutch force attempted to defend the entire island.¹⁰² Salazar's protests concerning the violation of his country's sovereignty and neutrality by both the Allies and the Japanese had failed to reestablish Portuguese rule on the island.¹⁰³ To uphold Portuguese sovereignty on Timor, Salazar wanted to enter the war against Japan at a favorable opportunity. Conscious of Salazar's desire, American diplomats emphasized that the greatest contribution that Portugal could make in the Far Eastern war was the construction of the Santa Maria base.¹⁰⁴ While Salazar was anxious to reincorporate Timor in the Portuguese Empire, he was reluctant to antagonize the Japanese at this time by openly associating Portugal with the United States. The Japanese might retaliate by seizing Macao, with its large European population.¹⁰⁵ However, as a gesture of good will, Salazar finally authorized the participation of an American naval air squadron in the Azores operations. Nevertheless, the Premier stipulated that this squadron must be under the command of the British.¹⁰⁶ Even a month after Normandy

the Portuguese insisted on maintaining their nominal neutrality.

On July 7, the Combined Chiefs agreed to initiate secret staff conversations with the Portuguese concerning their participation in the liberation of Timor, and on July 26 Salazar authorized Pan-Air to begin constructing an airdrome on Santa Maria Island.¹⁰⁷ A private company was chosen to construct the base at the expense of and ostensibly for the use of Portugal in order to maintain the facade of Portuguese neutrality. The United States was, of course, prepared to pay the building costs.¹⁰⁸

The issue of exclusive American use and control of the base complicated the negotiations. Several times Salazar indicated that the Americans could obtain the facility under the terms of the Anglo-Portuguese Agreement. But the Joint Chiefs insisted on excluding the British from participation. Since the base was considered important for the prosecution of the war against Japan and was to be constructed by the United States at a cost of thirteen million dollars, American military leaders insisted that United States should operate the facility. It was for this reason that the State Department requested and received permission from the British to conduct direct negotiations with the Portuguese for facilities beyond the terms of the Anglo-Portuguese Agreement.¹⁰⁹

Naturally, the Portuguese were suspicious of American intentions. They believed that the Americans might not leave after the war.¹¹⁰ As previously indicated, this was not a wholly incorrect assumption, since American postwar plans for the Azores certainly figured in the determination of the Pentagon to operate an airbase

there. Furthermore, the Portuguese were understandably reluctant to abandon their nominal neutrality until the defeat of the Axis seem imminent.¹¹¹

Negotiations on this issue continued into October when the Americans became impatient. In a statement on October 6, approved by Roosevelt, the Secretary of State threatened to discountinue the staff discussions concerning the liberation of Timor and to immediately curtail all American economic aid.¹¹² On October 11, Salazar agreed in principle to grant the United States use and control of the airbase on Santa Maria in return for the eventual participation of Portugal in the liberation of Timor.¹¹³ Salazar believed that such participation was essential to preserve Portugal's "prestige and honor."¹¹⁴ A formal exchange of notes sealed the agreement on November 28, 1944.¹¹⁵ Thus, the United States obtained the base in time for the Azores to play a substantial role in the Far Eastern campaign.¹¹⁶

* * * *

The Azores played a small but important role in the strategy and diplomacy of the Second World War. While the islands made a significant contribution to the allied anti-submarine campaign and the American air ferry and transport operations, much of their importance lay in the ifs and might-have-beens of history. For example, if the Germans had seized the Azores in 1940, they would have severely hampered British shipping and communications and threatened the Western Hemisphere. If the United States had occupied the Azores in 1941, so as to forestall a perceived Axis men-

ace to the islands, Germany would have marched into Iberia producing incalculable consequences for the course of the war in the Mediterranean. With Spain a belligerent, Gibraltar occupied, and the Straits closed, the British would have found it difficult, if not impossible, to maintain themselves in the Mediterranean and North Africa. If Atlee and especially Eden had not prevented the Allied seizure of the islands agreed to at the Trident Conference in 1943, Britain would have been guilty of attacking her oldest ally, and the United States would not only have violated the sovereignty and neutrality of a friendly nation but also ended any prospective postwar influence in the peninsula. In such an event, it is also difficult to believe that Portugal would have allowed the United States to retain a postwar base in the Azores or that, with the war over, America could have justified its presence there without Portuguese permission.

The loss of the Azores would have been a serious blow to the postwar policy of the United States. While American leaders eventually discarded the term "Four Policemen," they were anxious to implement the underlying concept as it applied to the United States alone or as an agent of the Security Council of the United Nations. Believing they had learned the lessons of appeasement, isolationism, and unpreparedness, American leaders were determined to preserve the world's peace and security (and consequently that of the United States) by exercising the nation's power and influence beyond its shores. To establish a global presence the United States required bases around the world. As early as 1943, a base

in the Azores was considered essential to any postwar network of strategic installations. The war had demonstrated that the United States was vulnerable to an attack by an enemy based in the islands. It had also proven that the Azores were invaluable in protecting and maintaining American sea and air communications with the world beyond the Atlantic. Therefore, in 1945, the State Department initiated negotiations which eventually secured postwar facilities in the islands for the United States.¹¹⁷

While the Azores contributed to the security of the Western Hemisphere and the global reach of American military power, the United States paid a price for its base there. In 1943, the Government promised to respect the sovereignty of Portugal in all her colonies in the islands. > In the postwar period criticism of the Portuguese colonial empire in Africa was muted because the Pentagon feared the loss of its facilities if the State Department too vigorously protested Portuguese policies there.¹¹⁸ Thus, political accommodation to Salazar in return for military access to the Azores in the fifties and sixties hampered America's ability to compete with the Soviets for influence in sub-Saharan Africa in the seventies.¹¹⁹

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NOTES

1. Hugh Kay, Salazar and Modern Portugal (New York, 1970), 160.
2. Ibid.
3. "History's Biggest Airlift," Time, October 29, 1973, 52.
4. Kay, Salazar, 223-224.
5. Robert G. Caldwell, "The Anglo-Portuguese Alliance," Foreign Affairs, XXI (October 1942), 148.
6. Discussion Points for the Report of the Commander in Chief to the Fuehrer, June 20, 1940, United States Department of the Navy, Fuehrer Conference on Matters Dealing with the German Navy, 1940 (2 vols.; Washington, 1947), I, 65. Views of the Naval Staff on Expansion of the Navy after the War, ibid., I, 73-74.
7. Stetson Conn and Byron Fairchild, The Framework of Hemisphere Defense (Washington, 1960), 26.
8. William L. Langer and S. Everett Gleason, The Undeclared War, 1940-1941 (New York, 1953), 180.
9. Mark S. Watson, Chief of Staff: Prewar Plans and Preparations (Washington, 1950), 116-117.
10. J.R.M. Butler, Grand Strategy, II: September, 1939-June, 1941 (London, 1957), 238-239.
11. Sir Llewellyn Woodward, British Foreign Policy in the Second World War (3 vols.; London 1970-1971), I, 443-444.
12. Ibid.
13. Butler, Grand Strategy, II, 239.
14. Conference of September 6, 1940, Fuehrer Conferences, 1940, II, 19.
15. Ibid., 20.
16. Fuehrer's Directive, November 12, 1940, United States Department of State, Documents on German Foreign Policy, 1918-1945, Series D (13 vols.; Washington, 1949-1964), XI, 528 (cited hereafter as DGFP).
17. Ibid., 530.

18. Fuehrer Conferences, 1940, II, 40.
19. Ibid., 41.
20. Ibid.
21. Butler, Grand Strategy, II, 432.
22. Captain S.W. Roskill, The War at Sea, 1939-1945, (3 vols.; London, 1954-1961), I, 273.
23. Woodward, British Foreign Policy, I, 444-445.
24. Ibid., 445.
25. Butler, Grand Strategy, II, 430.
26. Charles B. Burdick, Germany's Military Strategy and Spain in World War II (New York, 1968), 4.
27. F.H. Hinsley, Hitler's Strategy (Cambridge, 1951), 121.
28. Huene to Ribbentrop, November 14, 1940, DGFP, XI, 571-572.
29. Burdick, Germany's Military Strategy and Spain, 104.
30. Hinsley, Hitler's Strategy, 121-122.
31. Butler, Grand Strategy, II, 430.
32. Sir Llewellyn Woodward, British Foreign Policy in the Second World War (Abr.; London, 1962), 375.
33. Sir Winston S. Churchill, The Grand Alliance (The Second World War) (6 vols.; Boston, 1948-1953), III, 143.
34. Ibid.
35. Hull to Winant, May 1, 1941, United States Department of State, Foreign Relations of the United States, 1941 (7 vols.; Washington, 1956-1962, II, 839) (hereafter cited as FRUS, 1941).
36. Huene to Ribbentrop, March 31, 1941, DGFP, XII, 212.
37. United States Congress, The Congressional Record (77th Congress, 1st session; Washington, 1941), vol. 87, part 4, 3617.
38. Stetson Conn, Rose C. Engelman, and Byron Fairchild, Guarding the United States and Its Outposts (Washington, 1964), 465.
39. Ibid.

40. Robert E. Sherwood, Roosevelt and Hopkins: An Intimate History (New York, 1948), 296.
41. Maurice Matloff and Edwin M. Snell, Strategic Planning for Coalition Warfare, 1941-1942 (Washington, 1953), 50.
42. Declaration of a State of Unlimited National Emergency, Samuel S. Rosenman, ed., The Public Papers of Franklin D. Roosevelt (13 vols.; New York, 1938-1950), X, 181, 188-189.
43. Conference of May 22, 1941, United States Department of the Navy, Fuehrer Conferences on Matters Dealing With the German Navy, 1941 (2 vols.; Washington, 1947), I, 65.
44. Matloff and Snell, Coalition Warfare, 1941-1942, 43, 50; Richard M. Leighton and Robert W. Coakley, Global Logistics and Strategy, 1941-1943 (Washington, 1955), 68.
45. Hull to Fish, May 9, 1941, FRUS, 1941, II, 841-842.
46. Bianchi to Hull, May 30, 1941, ibid., II, 844-845.
47. Memo of Conversation, May 31, 1941, ibid., II, 781.
48. Directive of the High Command of the Army, May 7, 1941, DGFP, XII, 731.
49. Stohrer to Ribbentrop, May 12, 1941, ibid., XII, 781.
50. Conference of June 25, 1941, Fuehrer Conferences, 1941, II, 3.
51. Halifax to Hull, May 23, 1941, FRUS, 1941, 842-843; Johnson to Hull, May 29, 1941, ibid., II, 843; Conn and Fairchild, Hemisphere Defense, 122.
52. Conn and Fairchild, Hemisphere Defense, 121-124; Johnson to Hull, May 29, 1941, FRUS, 1941, II, 843.
53. Conn and Fairchild, Hemisphere Defense, 125; Coakley and Leighton, Global Logistics, 1941-1943, 75.
54. Roosevelt to Salazar, July 14, 1941, FRUS, 1941, II, 852.
55. Ibid.
56. Salazar to Roosevelt, July 14, 1941, FRUS, 1941, II, 852.
57. Meeting of the Combined Chiefs of Staff, December 24, 1941, United States Department of State, Foreign Relations of the United States: Conferences at Washington, 1941-1942 and Casablanca, 1943 (Washington, 1968), 85.

58. John Ehrman, Grand Strategy, V. August 1943-September 1944 (London, 1956), 73.

59. Samuel Eliot Morison, The Battle of the Atlantic, September 1939-May 1943 (vol. I, History of United States Naval Operations in World War II; Boston, 1948), 320.

60. Samuel Eliot Morison, The Battle of the Atlantic Won, May 1943-May 1945 (vol. X, History of United States Naval Operations in World War II; Boston, 1956), 44.

61. Report of the Combined Chiefs of Staff to President Roosevelt and Prime Minister Churchill, May 25, 1943, United States Department of State, Foreign Relations of the United States: Conference at Washington and Quebec, 1943 (Washington, 1970), 371-372 (cited hereafter as FRUS, CWQ).

62. Ibid., 372-373.

63. John D. Carter, "North Africa and the Mediterranean" in Services Around the World (vol. VII, The Army Air Forces in World War II, eds. W.F. Craven and J.L. Cate; Chicago, 1958), 87.

64. Hull to Fish, May 21, 1943, United States Department of State, Foreign Relations of the United States, 1943 (6 vols.; Washington, 1963-1965), II, 529-530 (hereafter cited as FRUS, 1943); Fish to Hull, May 25, 1943, ibid., II, 531-532; Winant to Hull, August 5, 1943, ibid., 540; Roosevelt to Churchill Meeting, August 17, 1943, FRUS, CWQ, 887.

65. Conference of May 14, 1943, United States Department of the Navy, Fuehrer Conferences on Matters Dealing with the German Navy, 1943 (2 vols.; Washington, 1947), I, 67.

66. Admiral William D. Leahy, I Was There (New York, 1950), 115.

67. Meeting of CCS with Roosevelt and Churchill, May 21, 1943, FRUS, CWQ, 152.

68. Meeting of CCS with Roosevelt and Churchill, May 19, 1943, ibid., 121.

69. Meeting of CCS with Roosevelt and Churchill, May 17, 1943, ibid., 91-92.

70. Meeting of CCS with Roosevelt and Churchill, May 19, 1943, ibid., 121-122.

71. Atlee and Eden to Churchill, May 21, 1943, ibid., 312.

72. Churchill to Atlee and Eden, May 21, 1943, ibid., 311.

73. Anthony Eden, The Reckoning: Memoirs of Anthony Eden, Earl of Avon (Cambridge, Mass., 1962), 455.
74. Meeting of CCS with Roosevelt and Churchill, May 21, 1943, FRUS, CWQ, 152-153.
75. Ibid., Michael Howard, Grand Strategy, IV: August 1941 - September 1943 (London, 1972), 454-455.
76. Eden, The Reckoning, 455-456.
77. Hugh Kay, Salazar, 167,
78. Ibid., 168. George F. Kennan, Memoirs, 1925-1950 (Boston, 1967), 146.
79. Winant to Hull, June 29, 1943, FRUS, 1943, II, 534-535; Woodward, British Foreign Policy, Abr., 380-381.
80. Ibid.; Winant to Hull, June 29, 1943, FRUS, 1943, II, 534-535.
81. Draft Report of CCS to Roosevelt and Churchill, May 24, 1943, FRUS, CWQ, 361.
82. Maurice Matloff, Coalition Planning for Strategic Warfare, 1943-1944 (Washington, 1959), 143n; Roosevelt-Stalin meeting, November 29, 1943, United States Department of State, Foreign Relations at the United States: Conferences at Cairo and Teheran, 1943, (Washington, 1941), 530-532 (hereafter cited as FRUS, CTC); Hopkins-Eden-Molotov Luncheon Meeting, November 30, 1943, ibid., 576; Attitude of the Soviet Government on European Political Questions Expressed by Marshal Stalin during the Teheran Conference, ibid., 846; Hull to Norweb, December 29, 1943, FRUS, 1943, II, 579.
83. Morison, Atlantic Battle Won, X, 45-46.
84. Hull to Winant, August 18, 1943, FRUS, 1943, II, 541.
85. Woodward, British Foreign Policy, Abr., 380-381.
86. Meeting of the CCS, August 23, 1943, FRUS, CWQ, 942.
87. Ibid., Hull to Winant, October 4, 1943, FRUS, 1943, II, 547; Hull to Winant, October 8, 1943, ibid., 550; Hull to Winant, October 14, 1943, ibid., 553; Kennan, Memoirs, 148-149.
88. Hull to Kennan, October 16, 1943, FRUS, 1943, II, 554-556; Kennan to Hull, October 20, 1943, ibid., II, 558-561; Kennan, Memoirs, 151-153.

89. Ibid., 154-155; Bianchi to Hull, October 30, 1943, FRUS, 1943, II, 562; Kennan, Memoirs, 160-161; Roosevelt to Salazar, November 4, 1943, FRUS, 1943, II, 546-565.

90. Kennan, Memoirs, 155; Salazar to Roosevelt, November 4, 1943, FRUS, 1943, II, 571-572; Norweb to Hull, November 24, 1943, ibid., II 569; Norweb to Hull, December 2, 1943, ibid., II, 573.

91. Morison, The Atlantic Battle Won, X, 45.

92. Roosevelt meets with the Joint Chiefs of Staff, November 19, 1943, FRUS, CTC, 260.

93. Carter, "North Africa and the Mediterranean" in Services Around the World, VII, 88-90.

94. Roosevelt meets with the JCS, November 19, 1943, FRUS, CTC, 260-261.

95. Ibid.

96. Hull to Norweb, December 23, 1943, FRUS, 1943, II, 577.

97. Ibid., Kennan, Memoirs, 161.

98. Norweb to Hull, December 31, 1943, FRUS, 1943, II, 580-581.

99. Norweb to Hull, January 13, 1944, United States Department of State, Foreign Relations of the United States, 1944 (7 vols., Washington, 1965-67, IV, 5-7) (hereafter cited as FRUS, 1944).

100. Hull to Norweb, May 17, 1944, ibid., IV, 23-24.

101. Hull to Norweb, July 3, 1944, ibid., IV, 41.

102. Woodward, Brit. For Pol., Abr., 376-378.

103. Ibid.

104. Hull to Norweb, June 30, 1944, FRUS, 1944, IV, 39-40.

105. Norweb to Hull, July 7, 1944, ibid., IV, 43.

106. Norweb to Hull, July 18, 1944, ibid., IV, 51.

107. Norweb to Hull, July 7, 1944, ibid., IV, 44-45; Norweb to Hull, July 26, 1944, ibid., IV, 63-64.

108. Hull to Norweb, July 20, 1944, ibid., IV, 54-56.

109. Department of State to the British Embassy, November 19, 1945, United States Department of State, Foreign Relations of the United States, 1945, (9 vols.; Washington, 1968-1969, VI, 206-210); Woodward, British Foreign Policy, Abr., 382.
110. Kennan, Memoirs, 160-161.
111. Norweb to Hull, July 19, 1944, FRUS, 1944, IV, 53.
112. Hull to Norweb, October 6, 1944, ibid., IV, 76-78.
113. Norweb to Hull, October 11, 1944, ibid., IV, 81.
114. Norweb to Hull, October 12, 1944, ibid., IV, 82.
115. Stettinuis to Roosevelt, November 29, 1944, ibid., 84.
116. Kay, Salazar, 170; Frank H. Heck, "The North Atlantic Route," in The Services Around the World, (vol. VII, Army Airforces Around the World, eds. W.F. Craven and J.L. Cate, Chicago, 1958), 148-151, 212-217; Carter, "North Africa and the Mediterranean," ibid., 87-91.
117. Roosevelt-Stalin meeting, November 29, 1943, FRUS, CTC, 530-532; John Lewis Gaddis, The United States and the Origins of the Cold War, 1941-1947 (New York, 1972), 353-354.
118. Kay, Salazar, 223-224.
119. "End of the Last Empire," Time, August 12, 1974, 33-34.

BIBLIOGRAPHY

Documents

United States, Congress, Congressional Record. 77th Congress.

United States, Department of the Navy. Fuehrer Conferences on Matters Dealing With the German Navy, 1940. 2 vols. Washington, 1947.

_____. Fuehrer Conferences on Matters Dealing with the German Navy, 1941. 2 vols. Washington, 1947.

_____. Fuehrer Conferences on Matters Dealing with the German Navy, 1943. Washington, 1947.

United States, Department of State. Documents on German Foreign Policy, 1918-1945 (Series D) 13 vols. Washington, D.C. 1949-1964. Vol. XI.

_____. Foreign Relations of the United States, 1941. 7 vols. Washington, D.C., 1956-1962. Vol. II.

_____. Foreign Relations of the United States, 1943. 6 vols. Washington, D.C., 1962-1965. Vol. II.

_____. Foreign Relations of the United States, 1944. 7 vols. Washington, D.C., 1963-1965. Vol. IV.

_____. Foreign Relations of the United States, 1945. 9 vols. Washington, D.C., 1968-1969. Vol. VI.

_____. Foreign Relations of the United States: Conferences at Washington, 1941-1942, and Casablanca, 1943. Washington, D.C., 1968.

_____. Foreign Relations of the United States: Conferences at Washington and Quebec, 1943. Washington, D.C., 1970.

_____. Foreign Relations of the United States: Conferences at Cairo and Teheran, 1943. Washington, D.C., 1961,

Books and Articles

"History's Biggest Airlift." Time, October 25, 1973.

Burdick, Charles B. Germany's Military Strategy and Spain in World War II. New York, 1968.

- Butler, J.R.M. ed. Grand Strategy, 6 vols. London, 1956-1972:
Butler, J.R.M. Grand Strategy, II: September 1939-June 1941.
London, 1957.
Ehrman, John. Grand Strategy, V: August 1943-September 1944.
London, 1956.
Howard, Michael. Grand Strategy, IV: August 1942-September 1943. London, 1972.
- Caldwell, Robert G. "Anglo-Portuguese Alliance Today." Foreign Affairs, XXI (1942) 148-157.
- Churchill, Sir Winston. The Second World War. 6 vols. Boston, 1948-1953.
- Conn, Stetson and Byron Fairchild. The Framework of Hemisphere Defense. Washington, 1960.
- Conn, Stetson, Rose C. Engleman, and Byron Fairchild. Guarding the United States and Its Outposts. Washington, 1964.
- Craven, Wesley Frank and James Lea Cate, eds. Army Air Forces in World War II. 7 vols., Chicago, 1949-1958.
- Eden, Anthony. The Reckoning: The Memoirs of Anthony Eden, Early of Avon. Cambridge, Mass., 1962.
- Gaddis, John Lewis. The United States and the Origins of the Cold War, 1941-1947. New York, 1972.
- Hinsley, F.H. Hitler's Strategy. Cambridge, 1951.
- Kennan, George F. Memoirs, 1925-1950. Boston, 1967.
- Langer, William Leonard and S. Everett Gleason. The Undeclared War, 1940-1941. New York, 1953.
- Leahy, Admiral William D. I Was There. New York, 1950.
- Leighton, Richard M. and Robert W. Coakley, Global Logistics and Strategy, 1940-1943. Washington, 1955.
- Matloff, Maurice and Edwin M. Snell. Strategic Planning for Coalition Warfare, 1941-1942. Washington, 1953.
- Matloff, Maurice. Strategic Planning for Coalition Warfare, 1943-1944. Washington, 1953.
- Morison, Samuel Eliot. History of the United States Naval Operations in World War II. 15 vols. Boston, 1947-1962.
- Rosenman, Samuel I., ed., The Public Papers and Addresses of Franklin D. Roosevelt. 13 vols. New York, 1938-1950.

Roskill, Captain S.W. The War at Sea. 3 vols. London,
1956-1961.

Sherwood, Robert Emmet. Roosevelt and Hopkins. New York, 1948.

Watson, Mark. Chief of Staff: Prewar Plans and Preparations.
Washington, 1950.

Woodward, Sir Llewellyn. British Foreign Policy in the Second
World War. 3 vols. London, 1970-1971.

_____. British Foreign Policy in the Second World War.
Abr. London, 1962.

CNA Professional Papers — 1976 to Present*

- PP 141
Mizrahi, Maurice M., "Generalized Hermite Polynomials," 5 pp., Feb 1976 (Reprinted from the Journal of Computational and Applied Mathematics, Vol. 1, No. 4 (1976), 273-277).
*Research supported by the National Science Foundation
- PP 143
Horowitz, Stanley and Sherman, Allan (LCdr., USN), "Maintenance Personnel Effectiveness in the Navy," 33 pp., Jan 1976 (Presented at the RAND Conference on Defense Manpower, Feb 1976) AD A021 581
- PP 144
Durch, William J., "The Navy of the Republic of China — History, Problems, and Prospects," 66 pp., Aug 1976 (Published in "A Guide to Asiatic Fleets," ed. by Barry M. Blechman and Robert Berman, Naval Institute Press) AD A030 480
- PP 145
Kelly, Anne M., "Port Visits and the "Internationalist Mission" of the Soviet Navy," 36 pp., Apr 1976, AD A023 436
- PP 147
Kessler, J. Christian, "Legal Issues in Protecting Offshore Structures," 33 pp., Jun 1976 (Prepared under task order N00014-68-A-0091-0023 for ONR) AD A028 389
- PP 149
Squires, Michael L., "Counterforce Effectiveness: A Comparison of the Tsipis "K" Measure and a Computer Simulation," 24 pp., Mar 1976 (Presented at the International Study Association Meetings, 27 Feb 1976) AD A022 591
- PP 150
Kelly, Anne M. and Petersen, Charles, "Recent Changes in Soviet Naval Policy: Prospects for Arms Limitations in the Mediterranean and Indian Ocean," 28 pp., Apr 1976, AD A 023 723
- PP 151
Horowitz, Stanley A., "The Economic Consequences of Political Philosophy," 8 pp., Apr 1976 (Reprinted from Economic Inquiry, Vol. XIV, No. 1, Mar 1976)
- PP 152
Mizrahi, Maurice M., "On Path Integral Solutions of the Schrodinger Equation, Without Limiting Procedure," 10 pp., Apr 1976 (Reprinted from Journal of Mathematical Physics, Vol. 17, No. 4 (Apr 1976), 566-576).
*Research supported by the National Science Foundation
- PP 153
Mizrahi, Maurice M., "WKB Expansions by Path Integrals, With Applications to the Anharmonic Oscillator," 137 pp., May 1976, AD A025 440
*Research supported by the National Science Foundation
- PP 154
Mizrahi, Maurice M., "On the Semi-Classical Expansion in Quantum Mechanics for Arbitrary Hamiltonians," 19 pp., May 1976 (Published in Journal of Mathematical Physics, Vol. 18, No. 4, pp. 789-790, Apr 1977), AD A025 441
- PP 155
Squires, Michael L., "Soviet Foreign Policy and Third World Nations," 26 pp., Jun 1976 (Prepared for presentation at the Midwest Political Science Association meetings, Apr 30, 1976) AD A028 388
- PP 156
Stallings, William, "Approaches to Chinese Character Recognition," 12 pp., Jun 1976 (Reprinted from Pattern Recognition (Pergamon Press), Vol. 8, pp. 87-98, 1976) AD A028 692
- PP 157
Morgan, William F., "Unemployment and the Pentagon Budget: Is There Anything in the Empty Pork Barrel?" 20 pp., Aug 1976 AD A030 455
- PP 158
Haskell, LCdr. Richard D. (USN), "Experimental Validation of Probability Predictions," 25 pp., Aug 1976 (Presented at the Military Operations Research Society Meeting, Fall 1976) AD A030 458
- PP 159
McConnell, James M., "The Gorshkov Articles, The New Gorshkov Book and Their Relation to Policy," 93 pp., Jul 1976 (Published in Soviet Naval Influence: Domestic and Foreign Dimensions, ed. by M. McGwire and J. McDonnell; New York: Praeger, 1977) AD A029 227
- PP 160
Wilson, Desmond P., Jr., "The U.S. Sixth Fleet and the Conventional Defense of Europe," 50 pp., Sep 1976, AD A030 457
- PP 161
Melich, Michael E. and Peet, Vice Adm. Ray (USN, Retired), "Fleet Commanders: Afloat or Ashore?" 9 pp., Aug 1976 (Reprinted from U.S. Naval Institute Proceedings, Jun 1976) AD A030 456
- PP 162
Friedhelm, Robert L., "Parliamentary Diplomacy," 106 pp. Sep 1976 AD A033 306
- PP 163
Lockman, Robert F., "A Model for Predicting Recruit Losses," 9 pp., Sep 1976 (Presented at the 84th annual convention of the American Psychological Association, Washington, D.C., 4 Sep 1976) (Published in Defense Manpower Policy (Richard V. L. Cooper, ed.), The Rand Corporation, 1979), AD A030 459
- PP 164
Mahoney, Robert B., Jr., "An Assessment of Public and Elite Perceptions in France, The United Kingdom, and the Federal Republic of Germany," 31 pp., Feb 1977 (Presented at Conference "Perception of the U.S. — Soviet Balance and the Political Uses of Military Power" sponsored by Director, Advanced Research Projects Agency, April 1976) AD A036 599
- PP 165
Jondrow, James M., "Effects of Trade Restrictions on Imports of Steel," 67 pp., November 1976, (Delivered at ILAB Conference in Dec 1976)
- PP 166 — Revised
Feldman, Paul, "Why It's Difficult to Change Regulation," Oct 1976, AD A037 682
- PP 167
Kleinman, Samuel, "ROTC Service Commitments: a Comment," 4 pp., Nov 1976, (Published in Public Choice, Vol. XXIV, Fall 1976) AD A033 305
- PP 168
Lockman, Robert F., "Revalidation of CNA Support Personnel Selection Measures," 36 pp., Nov 1976
- PP 169
Jacobson, Louis S., "Earnings Losses of Workers Displaced from Manufacturing Industries," 38 pp., Nov 1976, (Delivered at ILAB Conference in Dec 1976), AD A039 809
- PP 170
Brechtling, Frank P., "A Time Series Analysis of Labor Turnover," Nov 1976, (Delivered at ILAB Conference in Dec 1976)
- PP 171
Jordan, A. S.* and Ralston, J. M., "A Diffusion Model for GaP Red LED Degradation," 10 pp., Nov 1976, (Published in Journal of Applied Physics, Vol. 47, pp. 4518-4527, Oct 1976)
*Bell Laboratories
- PP 172
Classen, Kathleen P., "Unemployment Insurance and the Length of Unemployment," Dec 1976, (Presented at the University of Rochester Labor Workshop on 16 Nov 1976)
- PP 173
Kleinman, Samuel D., "A Note on Racial Differences in the Added-Worker/ Discouraged-Worker Controversy," 2 pp., Dec 1976, (Published in the American Economist, Vol. XX, No. 1, Spring 1976)
- PP 174
Mahoney, Robert B., Jr., "A Comparison of the Brookings and International Incidents Projects," 12 pp. Feb 1977 AD A037 206
- PP 175
Levine, Daniel; Stoloff, Peter and Spruill, Nancy, "Public Drug Treatment and Addict Crime," June 1976, (Published in Journal of Legal Studies, Vol. 5, No. 2)
- PP 176
Felix, Wendi, "Correlates of Retention and Promotion for USNA Graduates," 38 pp., Mar 1977, AD A039 040
- PP 177
Lockman, Robert F. and Warner, John T., "Predicting Attrition: A Test of Alternative Approaches," 33 pp. Mar 1977, (Presented at the OSD/ONR Conference on Enlisted Attrition, Xerox International Training Center, Leesburg, Virginia, 4-7 April 1977), AD A039 047
- PP 178
Kleinman, Samuel D., "An Evaluation of Navy Unrestricted Line Officer Accession Programs," 23 pp. April 1977, (Presented at the NATO Conference on Manpower Planning and Organization Design, Stresa, Italy, 20 June 1977), AD A039 048

*CNA Professional Papers with an AD number may be obtained from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151. Other papers are available from the Management Information Office, Center for Naval Analyses, 2000 North Beauregard Street, Alexandria, Virginia 22311. An Index of Selected Publications is also available on request. The index includes a Listing of Professional Papers, with abstracts, issued from 1969 to February 1978.

- PP 179
Stoloff, Peter H. and Balut, Stephen J., "Vacate: A Model for Personnel Inventory Planning Under Changing Management Policy," 14 pp. April 1977, (Presented at the NATO Conference on Manpower Planning and Organization Design, Stress, Italy, 20 June 1977), AD A039 049
- PP 180
Horowitz, Stanley A. and Sherman, Allan, "The Characteristics of Naval Personnel and Personnel Performance," 16 pp. April 1977, (Presented at the NATO Conference on Manpower Planning and Organization Design, Stress, Italy, 20 June 1977), AD A039 050
- PP 181
Balut, Stephen J. and Stoloff, Peter, "An Inventory Planning Model for Navy Enlisted Personnel," 35 pp., May 1977 (Prepared for presentation at the Joint National Meeting of the Operations Research Society of America and The Institute for Management Science, 9 May 1977, San Francisco, California), AD A042 221
- PP 182
Murray, Russell, 2nd, "The Quest for the Perfect Study or My First 1138 Days at CNA," 57 pp., April 1977
- PP 183
Kassing, David, "Changes in Soviet Naval Forces," 33 pp., November, 1976, (Published as part of Chapter 3, "General Purpose Forces: Navy and Marine Corps," in Arms, Men, and Military Budgets, Francis P. Hoerber and William Schneider, Jr. (eds.), (Crane, Russak & Company, Inc.: New York), 1977), AD A040 106
- PP 184
Lockman, Robert F., "An Overview of the OSD/ONR Conference on First Term Enlisted Attrition," 22 pp., June 1977, (Presented to the 39th MORS Working Group on Manpower and Personnel Planning, Annapolis, Md., 28-30 Jun 1977), AD A043 618
- PP 185
Kassing, David, "New Technology and Naval Forces in the South Atlantic," 22 pp. (This paper was the basis for a presentation made at the Institute for Foreign Policy Analyses, Cambridge, Mass., 28 April 1977), AD A043 619
- PP 186
Mizrahi, Maurice M., "Phase Space Integrals, Without Limiting Procedure," 31 pp., May 1977, (Invited paper presented at the 1977 NATO Institute on Path Integrals and Their Application in Quantum Statistical, and Solid State Physics, Antwerp, Belgium, July 17-30, 1977) (Published in Journal of Mathematical Physics 19(1), pp. 298-307, Jan 1978), AD A040 107
- PP 187
Coile, Russell C., "Nomography for Operations Research," 35 pp., April 1977 (Presented at the Joint National Meeting of the Operations Research Society of America and The Institute for Management Services, San Francisco, California, 9 May 1977), AD A043 620
- PP 188
Durch, William J., "Information Processing and Outcome Forecasting for Multilateral Negotiations: Testing One Approach," 53 pp., May 1977 (Prepared for presentation to the 18th Annual Convention of the International Studies Association, Chase-Park Plaza Hotel, St. Louis, Missouri, March 16-20, 1977), AD A042 222
- PP 189
Coile, Russell C., "Error Detection in Computerized Information Retrieval Data Bases," July, 1977, 13 pp. (Presented at the Sixth Cranfield International Conference on Mechanized Information Storage and Retrieval Systems, Cranfield Institute of Technology, Cranfield, Bedford, England, 26-29 July 1977), AD A043 580
- PP 190
Mahoney, Robert B., Jr., "European Perceptions and East-West Competition," 96 pp., July 1977 (Prepared for presentation at the annual meeting of the International Studies Association, St. Louis, Mo., March, 1977), AD A043 661
- PP 191
Sawyer, Ronald, "The Independent Field Assignment: One Man's View," August 1977, 25 pp.
- PP 192
Holen, Arlene, "Effects of Unemployment Insurance Entitlement on Duration and Job Search Outcome," August 1977, 6 pp., (Reprinted from Industrial and Labor Relations Review, Vol., 30, No. 4, Jul 1977)
- PP 193
Horowitz, Stanley A., "A Model of Unemployment Insurance and the Work Test," August 1977, 7 pp. (Reprinted from Industrial and Labor Relations Review, Vol. 30, No. 40, Jul 1977)
- PP 194
Classen, Kathleen P., "The Effects of Unemployment Insurance on the Duration of Unemployment and Subsequent Earnings," August 1977, 7 pp. (Reprinted from Industrial and Labor Relations Review, Vol. 30, No. 40, Jul 1977)
- PP 195
Brechtling, Frank, "Unemployment Insurance Taxes and Labor Turnover: Summary of Theoretical Findings," 12 pp. (Reprinted from Industrial and Labor Relations Review, Vol. 30, No. 40, Jul 1977)
- PP 196
Ralston, J. M. and Lorimor, O. G., "Degradation of Bulk Electroluminescent Efficiency in Zn, O-Doped GaP LED's," July 1977, 3 pp. (Reprinted from IEEE Transactions on Electron Devices, Vol. ED-24, No. 7, July 1977)
- PP 197
Wells, Anthony R., "The Centre for Naval Analyses," 14 pp., Dec 1977, AD A049 107
- PP 198
Classen, Kathleen P., "The Distributional Effects of Unemployment Insurance," 25 pp., Sept. 1977 (Presented at a Hoover Institution Conference on Income Distribution, Oct 7-8, 1977), AD A054 423
- PP 199
Durch, William J., "Revolution From A F.A.R. - The Cuban Armed Forces in Africa and the Middle East," Sep 1977, 16 pp., AD A046 268
- PP 200
Powers, Bruce F., "The United States Navy," 40 pp. Dec 1977 (Published as a chapter in The U.S. War Machine by Salamander Books, England, 1978), AD A049 108
- PP 201
Durch, William J., "The Cuban Military in Africa and The Middle East: From Algeria to Angola," Sep 1977, 67 pp., AD A045 675
- PP 202
Feldman, Paul, "Why Regulation Doesn't Work," (Reprinted from Technological Change and Welfare in the Regulated Industries, Brookings Reprint 219, 1971, and Review of Social Economy, Vol. XXIX, March, 1971, No. 1.) Sep 1977, 8 pp.
- PP 203
Feldman, Paul, "Efficiency, Distribution, and the Role of Government in a Market Economy," (Reprinted from The Journal of Political Economy, Vol. 79, No. 3, May/June 1971.) Sep 1977, 19 pp., AD A045 675
- PP 204
Wells, Anthony R., "The 1967 June War: Soviet Naval Diplomacy and The Sixth Fleet - A Re-appraisal," Oct 1977, 36 pp., AD A047 236
- PP 205
Coile, Russell C., "A Bibliometric Examination of the Square Root Theory of Scientific Publication Productivity," (Presented at the annual meeting of the American Society for Information Science, Chicago, Illinois, 29 September 1977.) Oct 1977, 6 pp., AD A047 237
- PP 206
McConnell, James M., "Strategy and Missions of the Soviet Navy in the Year 2000," 48 pp., Nov 1977 (Presented at a Conference on Problems of Sea Power as we Approach the 21st Century, sponsored by the American Enterprise Institute for Public Policy Research, 6 October 1977, and subsequently published in a collection of papers by the Institute), AD A047 244
- PP 207
Goldberg, Lawrence, "Cost-Effectiveness of Potential Federal Policies Affecting Research & Development Expenditures in the Auto, Steel and Food Industries," 36 pp., Oct 1977, (Presented at Southern Economic Association Meetings beginning 2 November 1977), AD A046 269
- PP 208
Roberts, Stephen S., "The Decline of the Overseas Station Fleets: The United States Asiatic Fleet and the Shanghai Crisis, 1932," 18 pp., Nov 1977 (Reprinted from The American Neptune, Vol. XXXVII, No. 3, July 1977), AD A047 245
- PP 209 - Classified.
- PP 210
Kassing, David, "Protecting The Fleet," 40 pp., Dec 1977 (Prepared for the American Enterprise Institute Conference on Problems of Sea Power as We Approach the 21st Century, October 6-7, 1977), AD A049 109
- PP 211
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- PP 212
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- PP 213
Mangel, Marc, "Fluctuations in Systems with Multiple Steady States. Application to Lancaster Equations," 12 pp., Feb 78, (Presented at the First Annual Workshop on the Information Linkage Between Applied Mathematics and Industry, Naval PG School, Feb 23-25, 1978), AD A071 472

- PP 214
Weinland, Robert G., "A Somewhat Different View of The Optimal Naval Posture," 37 pp., Jun 1978 (Presented at the 1978 Convention of the American Political Science Association (APSA/IUS Panel on "Changing Strategic Requirements and Military Posture"), Chicago, Ill., September 2, 1978), AD A056 228
- PP 215
Coile, Russell C., "Comments on: Principles of Information Retrieval by Manfred Kochen," 10 pp., Mar 78, (Published as a Letter to the Editor, Journal of Documentation, Vol. 31, No. 4, pages 298-301, December 1975), AD A054 426
- PP 216
Coile, Russell C., "Lotka's Frequency Distribution of Scientific Productivity," 18 pp., Feb 1978, (Published in the Journal of the American Society for Information Science, Vol. 28, No. 6, pp. 366-370, November 1977), AD A054 425
- PP 217
Coile, Russell C., "Bibliometric Studies of Scientific Productivity," 17 pp., Mar 78, (Presented at the Annual meeting of the American Society for Information Science held in San Francisco, California, October 1978), AD A054 442
- PP 218 - Classified.
- PP 219
Huntzinger, R. LaVar, "Market Analysis with Rational Expectations: Theory and Estimation," 60 pp., Apr 78, AD A054 422
- PP 220
Maurer, Donald E., "Diagonalization by Group Matrices," 26 pp., Apr 78, AD A054 443
- PP 221
Weinland, Robert G., "Superpower Naval Diplomacy in the October 1973 Arab-Israeli War," 76 pp., Jun 1978 (Published in Seapower in the Mediterranean: Political Utility and Military Constraints, The Washington Papers No. 61, Beverly Hills and London: Sage Publications, 1979) AD A055 564
- PP 222
Mizrahi, Maurice M., "Correspondence Rules and Path Integrals," 30 pp., Jun 1978 (Invited paper presented at the CNRS meeting on "Mathematical Problems in Feynman's Path Integrals," Marseille, France, May 22-26, 1978) (Published in Springer Verlag Lecture Notes in Physics, 106, (1979), 234-253) AD A055 536
- PP 223
Mangel, Marc, "Stochastic Mechanics of Molecule-Molecule Reactions," 21 pp., Jun 1978, AD A056 227
- PP 224
Mangel, Marc, "Aggregation, Bifurcation, and Extinction in Exploited Animal Populations," 48 pp., Mar 1978, AD A058 536
*Portions of this work were started at the Institute of Applied Mathematics and Statistics, University of British Columbia, Vancouver, B.C., Canada
- PP 225
Mangel, Marc, "Oscillations, Fluctuations, and the Hopf Bifurcation," 43 pp., Jun 1978, AD A058 537
*Portions of this work were completed at the Institute of Applied Mathematics and Statistics, University of British Columbia, Vancouver, Canada.
- PP 226
Rakston, J. M. and J. W. Mann, "Temperature and Current Dependence of Degradation in Red-Emitting GaP LEDs," 34 pp., Jun 1978 (Published in Journal of Applied Physics, 50, 3630, May 1979) AD A058 538
*Bell Telephone Laboratories, Inc.
- PP 227
Mangel, Marc, "Uniform Treatment of Fluctuations at Critical Points," 50 pp., May 1978, AD A058 539
- PP 228
Mangel, Marc, "Relaxation at Critical Points: Deterministic and Stochastic Theory," 54 pp., Jun 1978, AD A058 540
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Mangel, Marc, "Diffusion Theory of Reaction Rates, I: Formulation and Einstein-Smoluchowski Approximation," 50 pp., Jan 1978, AD A058 541
- PP 230
Mangel, Marc, "Diffusion Theory of Reaction Rates, II Ornstein-Uhlenbeck Approximation," 34 pp., Feb 1978, AD A058 542
- PP 231
Wilson, Desmond P., Jr., "Naval Projection Forces: The Case for a Responsive MAF," Aug 1978, AD A058 543
- PP 232
Jacobson, Louis, "Can Policy Changes Be Made Acceptable to Labor?" Aug 1978 (Submitted for publication in Industrial and Labor Relations Review), AD A061 528
- PP 233
Jacobson, Louis, "An Alternative Explanation of the Cyclical Pattern of Quites," 23 pp., Sep 1978
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Jondrow, James and Levy, Robert A., "Does Federal Expenditure Displace State and Local Expenditure: The Case of Construction Grants," 25 pp., Oct 1979
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Mizrahi, Maurice M., "The Semiclassical Expansion of the Anharmonic-Oscillator Propagator," 41 pp., Oct 1978 (Published in Journal of Mathematical Physics 20 (1979), pp. 844-855), AD A061 538
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Maurer, Donald, "A Matrix Criterion for Normal Integral Bases," 10 pp., Jan 1979 (Published in the Illinois Journal of Mathematics, Vol. 22 (1978), pp. 672-681)
- PP 238
Utgoff, Kathleen Classen, "Unemployment Insurance and The Employment Rate," 20 pp., Oct 1978 (Presented at the Conference on Economic Indicators and Performance: The Current Dilemma Facing Government and Business Leaders, presented by Indiana University Graduate School of Business), AD A061 527
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Trost, R. P. and Warner, J. T., "The Effects of Military Occupational Training on Civilian Earnings: An Income Selectivity Approach," 38 pp., Nov 1979, AD A077 831
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Powers, Bruce, "Goals of the Center for Naval Analysis," 13 pp., Dec 1978, AD A063 759
- PP 241
Mangel, Marc, "Fluctuations at Chemical Instabilities," 24 pp., Dec 1978 (Published in Journal of Chemical Physics, Vol. 69, No. 8, Oct 15, 1978), AD A063 787
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Simpson, William R., "The Analysis of Dynamically Interactive Systems (Air Combat by the Numbers)," 160 pp., Dec 1978, AD A063 760
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Simpson, William R., "A Probabilistic Formulation of Murphy Dynamics as Applied to the Analysis of Operational Research Problems," 18 pp., Dec 1978, AD A063 761
- PP 244
Sherman, Allan and Horowitz, Stanley A., "Maintenance Costs of Complex Equipment," 29 pp., Dec 1978 (Published By The American Society of Naval Engineers, Naval Engineers Journal, Vol. 91, No. 6, Dec 1979) AD A071 473
- PP 245
Simpson, William R., "The Accelerometer Methods of Obtaining Aircraft Performance from Flight Test Data (Dynamic Performance Testing)," 403 pp., Jun 1979, AD A075 226
- PP 246
Brechtling, Frank, "Layoffs and Unemployment Insurance," 35 pp., Feb 1979 (Presented at the NBER Conference on "Low Income Labor Markets," Chicago, Jun 1978)
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Thomas, James A., Jr., "The Transport Properties of Dilute Gases in Applied Fields," 183 pp., Mar 1979
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Nunn, Walter R., "Position Finding with Prior Knowledge of Covariance Parameters," 5 pp., Jun 1979 (Published in IEEE Transactions on Aerospace & Electronic Systems, Vol. AES-15, No. 3, March 1979)
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Glasser, Kenneth S., "The d-Choice Secretary Problem," 32 pp., Jun 1979, AD A075 225
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Petersen, Charles C., "Third World Military Elites in Soviet Perspective," 50 pp., Nov 1979, AD A077 835

PP 263

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Weinland, Robert G., "The U.S. Navy in the Pacific: Past, Present, and Glimpses of the Future," 31 pp., Nov 1979 (Delivered at the International Symposium on the Sea, sponsored by the International Institute for Strategic Studies, The Brookings Institution and the Yomiuri Shimbun, Tokyo, 16-20 Oct 1978) AD A066 837

PP 265

Weinland, Robert G., "War and Peace in the North: Some Political Implications of the Changing Military Situation in Northern Europe," 18 pp., Nov 1979 (Prepared for presentation to the "Conference of the Nordic Balance in Perspective: The Changing Military and Political Situation," Center for Strategic and International Studies, Georgetown University, Jun 15-16, 1978) AD A077 838

PP 266

Utgoff, Kathy Classen, and Brechling, Frank, "Taxes and Inflation," 25 pp., Nov 1979

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Trost, Robert P., and Vogel, Robert C., "The Response of State Government Receipts to Economic Fluctuations and the Allocation of Counter-Cyclical Revenue Sharing Grants," 12 pp., Dec 1979 (Reprinted from the Review of Economics and Statistics, Vol. LXI, No. 3, August 1979)

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Thomason, James S., "Seaport Dependence and Inter-State Cooperation: The Case of Sub-Saharan Africa," 141 pp., Jan 1980

PP 269

Weiss, Kenneth G., "The Soviet Involvement in the Ogaden War," 42 pp., Jan 1980 (Presented at the Southern Conference on Slavic Studies in October, 1979)

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Remnek, Richard, "Soviet Policy in the Horn of Africa: The Decision to Intervene," 52 pp., Jan 1980 (To be published in "The Soviet Union in the Third World: Success or Failure," ed. by Robert H. Donaldson, Westview Press, Boulder, Co., Summer 1980)

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