



AMERICAN
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FIELD STAFF

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FUEL FOR THE FIRE: OIL
AND THE FUTURE OF THE SAHARA

A Letter from Charles F. Gallagher

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PHILLIPS TALBOT
EXECUTIVE DIRECTOR

Rabat
January 24, 1958

It may seem surprisingly early in the season to name any one particular happening "The event of the year" in North Africa, and yet it is almost certain that it has already taken place in these first budding weeks of 1958.

The scene was the small, mountain-girt port of Philippeville, on the Mediterranean coast of Algeria; a town which was the site of one of the bloodiest outbreaks of the Algerian revolution two years ago. The time, Saturday, January 13, around noon. And the event, the arrival of a freight train four cars of which were bringing to the coast the first 250 tons (one metric ton is a little less than seven barrels) of oil brought out from the Saharan field of Hassi Messaoud, the new treasure trove the French have found and begun to exploit in southern Algeria.

Only a simple ceremony, almost self-consciously austere, greeted the incoming train. Most of the cars were prosaically hauling a cargo of dates, which in the past had represented the only export from the Touggourt desert oases where the rail line began. The physical arrangements which had been made to insure the safety of the convoy, however, were anything but simple. Two and a half days had been necessary to make the 350-mile trip from the Touggourt railhead to Philippeville. The train, driven by a 2000-horsepower armored locomotive, needed an extra push from another Diesel engine, and throughout the passage of the convoy, which moved only during daylight hours, the precious cargo was watched over by fighter planes, hovering helicopters and Piper Cub spotters. At night the train halted, the last night near Kroubs, just south of Constantine in the guerrilla-infested Aurès Mountains where the revolution began in 1954. All along the route through the Aurès the burnt-out remains of railroad cars, the overturned, charred trucks lying in ravines beside the highway that runs

generally parallel to the rail tracks, and the decapitated trunks of telephone poles, bore witness to the rebels' past activity in the area. Every so often a patrol of armored cars waited at a crucial bend in the mountain road overlooking the rail line, establishing a road block which checked all highway traffic in the area.

Staid Philippeville and its 30,000 Europeans (out of a total of 70,000) took the events in stride. Farther south, in one of the bars which helped give Touggourt its "wild west" atmosphere, a little enthusiasm was raised when a beer-bottleful of oil was lit in celebration by a group of French engineers, oilmen, and reporters. But the official reaction came from Max Lejeune, Minister of the Sahara, who spoke from the oil fields:

"There will be no official ceremony to inaugurate this pipeline nor for the departure of the first oil train; these are facts belonging to the daily life of the nation.

"The oil will be dispatched from Touggourt at a rate desired by the authorities and the oil companies. In a few years France, with outside help, will have her own independent fuel supply. France will become, after the United States and the U.S.S.R., the third greatest world power in terms of energy. We plan to attain this goal and nothing will keep us from it."

"The oil road is open!" blazoned French newspapers in Algiers, and as it opened security closed down upon the area. The military commandant of the Department of the Oases ordered that "Every person entering these territories by land or air must have a laissez-passer which is to be visaed by the administrative authority within 24 hours. All work projects operating in the territory (oil prospecting or exploitation, road work, etc.) must inform the authorities of the movements of their personnel."

CHARLES F. GALLAGHER has since 1951 been a student of the affairs of Northwest Africa. He started his higher education at the University of California just after Pearl Harbor and soon was shifted to the Japanese language school at Boulder, Colo. He served out the war as an officer in the Navy and then became fine arts advisor on Japanese cultural property during the occupation of Japan. In 1949 he entered Harvard University to major in Far Eastern languages and history. He was graduated *summa cum laude* in 1951. Subsequently he was twice offered Harvard-Yenching fellowships to continue in the Far Eastern field, but decided instead to study Islamic society. Under Fulbright and Ford fellowships, he worked for two years in Paris and three years in North Africa. After completing his research in Rabat, he settled in Tangier to write a history of Morocco and a grammar of Maghrebian Arabic. He joined the AUFS in July 1956 as a staff member and participated in the 1956-57 program of visits to member institutions. In the summer of 1957 he returned to North Africa under AUFS auspices.

The security precautions were not without reason. For months the military leaders of the Liberation Front (FLN) had been threatening to open a "Saharan front" and one group of prospectors had fallen victim to one of their raiding parties last fall. Within recent weeks FLN tracts had been circulated threatening to prevent the passage of any oil trains, and while the first shipment was leaving Touggourt on the 10th, a delayed-action mine planted by nationalists was set off a few miles north of Constantine by another freight train on the same line. Repairs to the line were effected in record time and the oil convoy got through without excessive delay, but it was clear that the mine was meant for it. Meanwhile tank cars began lining up at Biskra and from there, later in the week, another much larger convoy of some twenty wagons headed north. The oil road was indeed open, and the political and economic face of North Africa will never be the same again.

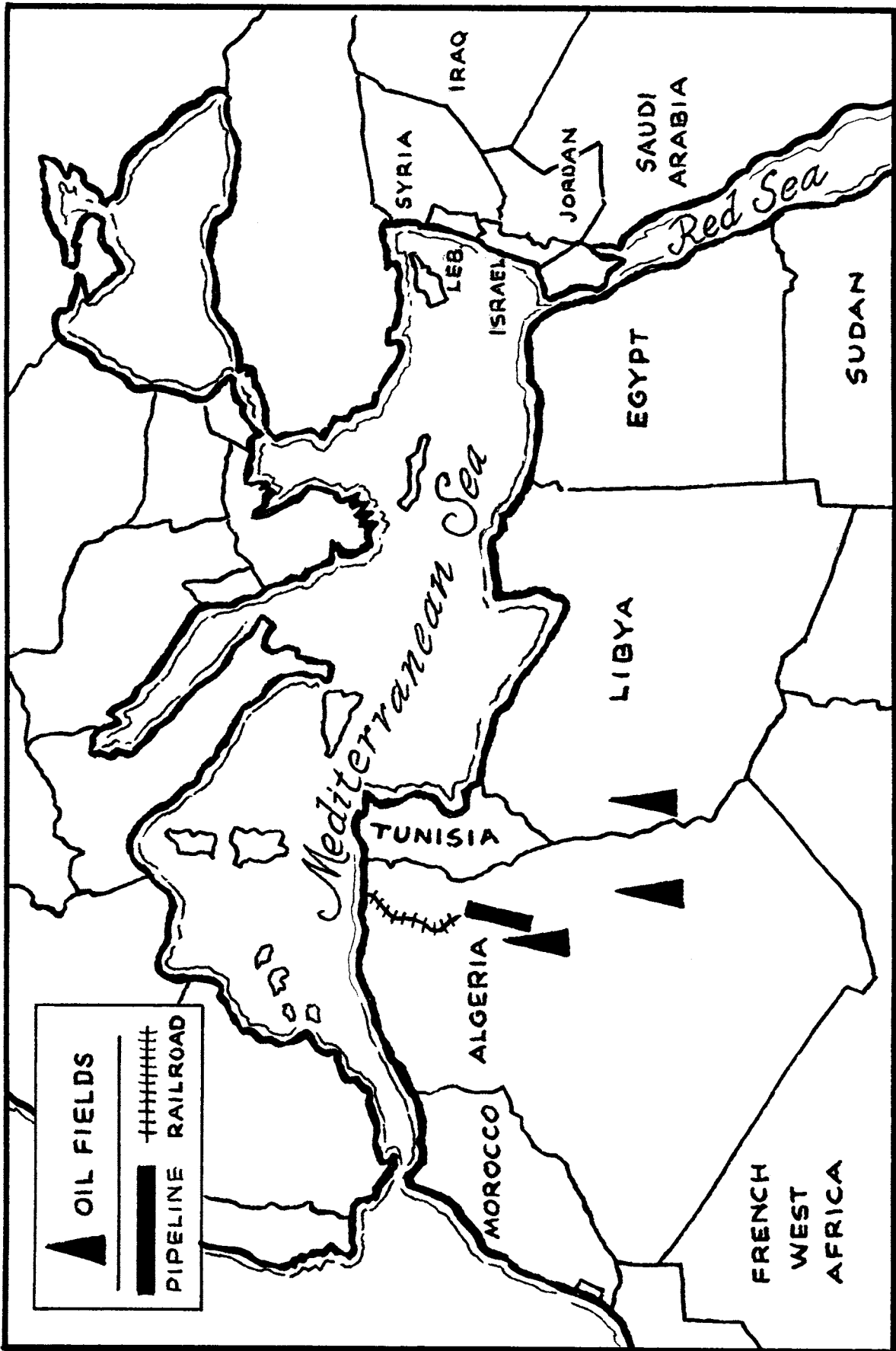
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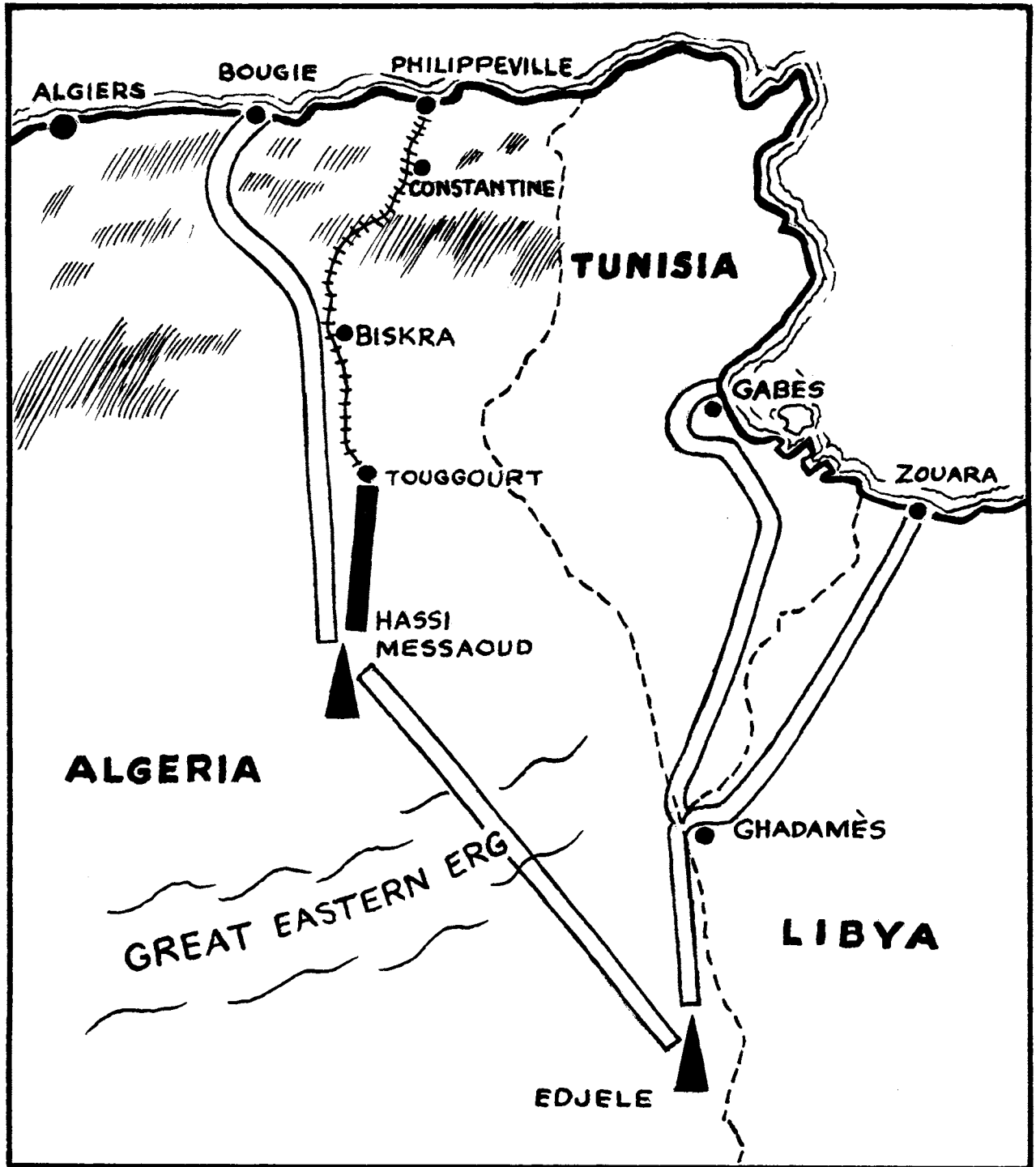
The oil road begins at Hassi Messaoud, a desolate site in the Northern Saharan Depression, a rocky wasteland which lies between the Great Eastern Erg (Dunes) on the south, and the last eastward outposts of the long Atlas Mountain chain on the north. Within the past year drillings at Hassi Messaoud have exceeded the highest hopes. Proved reserves are now evaluated at about 300,000,000 tons, and talk is now heard of possible reserves of one billion tons for this field alone, making it one of the world's great oil deposits, beginning to rank in importance with some of Middle Eastern fields. As one indication, the proved reserves at Hassi Messaoud now equal all the rest of those in Europe and Africa together, and the two billion-odd barrels lying there compare not unfavorably with the proved reserves of Venezuela (16 billion barrels) or the United States (33 billion barrels).

From Hassi Messaoud a six-inch pipeline, with two pumping stations, was laid last autumn 105 miles across the desert to the rail head at Touggourt. Capacity of the line is at present 1200 tons daily. The limits of this "bébé-pipe," as it is known to French engineers, and of the tank cars which take the oil on from Touggourt to the coast, have long been evident to the two companies which are drilling at Hassi Messaoud: Compagnie Française des Pétroles Algériens (CFPA) and the Société Nationale de Recherches et d'Exploitations des Pétroles en Algérie (SNREPAL). These improvised solutions can supply at most only 440,000 tons of the 24,000,000 tons of oil which France imports annually -- less than two per cent.

Thus, getting the oil out on a rational basis in sufficient quantity has succeeded prospecting as the primary problem. A few months ago the construction of a pipeline of wide diameter was decided upon by CFPA and SNREPAL, the line to run from Touggourt through Biskra to the port of Bougie on the Mediterranean, where, in a well-protected harbor, tankers will be filled by sea-lines stretching out from the docks.

The tracing of the route has been entrusted to a subsidiary of the two exploiting companies, TRAPIL (Transports par Pipeline) and the actual construction and operation of the pipeline will be handled by another junior branch, SOPEG (Société Pétrolière de Gestion). Although a study of the route has not yet been completed in detail, a general outline of the installations is known. The pipeline will have a diameter of 24 inches as far as the Hodna Mountains, north of Biskra, where it crosses a height of land at about 3,600 feet, and from there to the sea it will be 20 inches wide. The length of the





//// ALT. +1000 METERS (3300 FT.)

++++ RAILROAD

█ PIPELINE

▭ PROPOSED PIPELINE

line will be 680 km. (425 miles) and the tube will run underground at all times -- an ominous indication that rebel sabotage is probably still to be feared when construction is completed in 1960. The cost of the whole installation, including enlargement of port facilities at Bougie, will run between 30 and 36 billion francs (about \$72-85,000,000).

In spite of difficulties of terrain, which involve crossing two mountain ranges and following a tortuous river valley in the last part of the journey, the need in many places to build roads to service the work-camps for the line, an adverse climate (scorching sun in summer, violent rains and snow on the heights in winter), and the general insecurity along the way, completion date has been set for not later than January 1960, and it is even thought possible that partial flow can be started three months before then. The most difficult task technically is not the laying of the tubes themselves, which can be done at a rate of three to four kilometers a day, but the construction of the pumping stations and reservoirs.

The planned capacity of the pipeline is about ten million tons a year (which will take care of more than 40 per cent of France's present needs), but the oilmen are always quick to add that this can be realized only "if everything goes well." It is hard to imagine anything more challenging at the moment, with less chance of going well, than building a pipeline through rebel-infested territory in Algeria in 1958. A formidable military force will surely have to be detailed as cover for the operation, and FLN irregulars will make every effort to impede the project. In ways the construction of the pipeline calls to mind the laying of the transcontinental railroad tracks across the western United States in the 1860's, with the difference that the attacks of a constantly better supplied Algerian underground will be much more worrisome than the skirmish tactics of the Plains Indians.

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Some five hundred miles southeast of Hassi Messaoud, almost on the Libyan border, lies Edjelé, the second proved Saharan oil area of importance, but one which has not as yet revealed the true bonanza quality of Hassi Messaoud.¹ It was here in 1956 that the first oil in the Sahara was found by CREPS (Compagnie de Recherches et d'Exploitation au Sahara). Some thirty soundings at relatively shallow depths of from 400-600 meters indicate reserves of around 30 million tons, a respectable figure, but no more than one-tenth the size of those proved at Hassi Messaoud.

The question of evacuating this oil -- at the usual rate of 1-25th of the total reserves per year (which in this case would be about two million tons a year) -- has been under study for some time. Political considerations dominate the choice of a pipeline route from Edjelé, unless the solution is adopted of connecting the southern fields with those at Hassi Messaoud. This proposition is viewed with disfavor not only because of the enormous technical difficulties of crossing the Great Eastern Erg with its massive shifting

¹ Just as this is written, late in January, a seemingly big find has been made at Zarzaitine in the Edjelé region. French engineers think they are dealing with a new oilfield and that this is further confirmation of the fact that, so far as Saharan oil is concerned, only the first returns are in.

dunes capable of burying long stretches of the line under hundreds of feet of sand, but through fear that, if the Edjelé reserves are found to be considerably greater than now suspected (which begins to seem likely) there will be simply too much oil to be channeled through one insufficient artery. Reasons of security as well as economic diversification are adduced by the partisans of so-called "foreign solution," which calls for running a pipeline to either the Tunisian or the Libyan shores of the Mediterranean. Two projects have been considered: both go through Ghadamès and then split to end at the coast either at Zouara, in western Tripolitania, or near Gabès, in Tunisia. Both were being discussed with the respective governments to see which would offer the better terms, while Paris officials were trying to decide which of the two governments offered the better political gamble in the long haul ahead. Recent Franco-Tunisian border incidents have so upset French parliamentarians that chances for Tunisia getting the pipeline now appear very slim -- but no final decision has been made. In any event, whichever is chosen, the Edjelé pipeline will run roughly 600-700 kilometers (375-440 miles) and will also be equipped with two pumping stations. The over-all cost is estimated at 30 billion francs (\$72,000,000), and, if work is begun quickly, it is thought the line could be inaugurated in the first quarter of 1960.

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As a result of these discoveries North Africa, as if its internal social revolutions were not challenge enough, has been plunged into the maelstrom of international oil politics, perhaps at a time when it is least ready for it. One frequent comment these days is that Morocco and Tunisia were extremely lucky, from a disinterested point of view, to have won independence before France struck it rich in the Sahara, and that Algeria is correspondingly unfortunate. This is partially true in that one cannot underestimate the added impetus that will be given to French tenacity in combatting the Algerian nationalist movement, but it would be equally unwise to discount the perseverance of the FLN when it, too, realizes the prizes of victory. What is certain is that, because of oil, relations among all the North African states, as well as between them and France, and the outside world have been considerably changed.

It goes without saying that in the struggle for Algeria itself the stakes have been raised almost to the nth power. From the French standpoint, the discovery of oil makes the continuation of the "pacification" worth the cost (cf. CFG-8-'57, "What Price Algeria"), or it at least allows the government and the oil companies (who are inextricably intertwined from now on) to sell the nation on the virtues of a continuing Algérie française. And this is not such a hard sell any longer; the overwhelming public response to an Algerian oil stock issue put on the market last fall, long before recent events upgraded the extent of the oil reserves, showed that many French, whatever their moral doubts about Algeria, were not allowing their liberal political attitudes to interfere with their petit bourgeois idea of a profitable investment. A parallel with the Suez Canal question is easily drawn -- and, in fact, one wonders how many holders of coupons of the Compagnie Universelle de Suez are now in Algerian oil. Canal stock was widely held throughout middle-class France and it was the support of these people, in addition to the pressure of the company itself and political events which formed the united France that set out to overthrow Nasser. Now, in Algeria, every one of these stockholders will be, as the advertisements say, a trustee in the nation's business, and the business of the republic will be to keep physical

control of the only sizeable quantity of oil within the franc zone.²

As the Algerian nationalists see it, of course, this whole operation is just one more example of colonialist robbery. To them it is the final despoliation of the national patrimony: having occupied the country and delegated to themselves the best lands, which were then given over to the useless cultivation of the vine, the French are now stealing the underground resources as well. The dominant theme of FLN statements on the subject is that Algerian oil is for the Algerians, that it is Arab oil, and that it is the only Arab oil not in Arab hands.

For the FLN the propaganda aspect of the situation is made-to-order, and its military strategy is clear. Nothing could be more easily found to dramatize the economic slavery of Algeria than the flow of oil from Algerian ports into tankers which transport it to Marseilles for refining; and no action could be more patriotically heroic than stopping at all cost this hemorrhage of the fatherland's economic riches. If the oil is an economic necessity to France, it has become a psychological imperative to the rebels. "Le pétrole ne passera pas," said, with an icy quietness, one FLN leader who had an ironic sense of history. In the past there have been few wanton acts of destruction against the basic elements of Algeria's infrastructure, like the high tension network, electric power plants and the dam system. This testified to an understanding on the part of the rebels that the returns from such tactics were not commensurate with the loss that the country as a whole would suffer. But these observations do not apply to the oil which they feel will be of no benefit to Algeria itself. With the passage of the oil a question of life-or-death military prestige, it is a safe bet that the route of the projected pipeline from Touggourt to Bougie will be the theater of important operations within a short time.

But political, as opposed to military, struggles for control of the Sahara -- a territory as large as the United States -- are not confined to the French and the Algerians. Other lands, within and without the French Union, are vitally interested. Notably so are the Black African territories of French West Africa: French Sudan (not to be confused with the independent Sudan), Niger, Chad and Mauretania, all territories which border on the Sahara from the south. This month, after the inaugural ceremonies at Hassi Messaoud, the Minister of the Sahara carefully extended his Algerian swing southward to Bamako and explained to members of the Sudan cabinet the goals of the recently set-up Organisation Commune des Régions Sahariennes (OCRS), a kind of all-Saharan development board, which many have feared would try to remake the political map of the Sahara to the detriment of their own particular territory.

² A recent article in The Reporter of December 26, 1957, "France Finds Treasure in the Desert" discusses the attitude of participating oil companies toward the nationalist movement. It is an interesting account, but when it says that the oil companies are not greatly upset at the prospect of rebel activities and that whichever side wins they will still be needed to assure the maximum production and exportation of oil, it seems that the author (and the oil companies) are unaware of, or unwilling to see the nature of the real revolution which is taking place in the Arab world, and the lengths to which Arab nationalists are prepared to go in order to change social and economic conditions in their countries.

Whether or not the territories of French West Africa, now partially self-governing for the first time, will feel that continued metropolitan control of the Sahara will offer them a larger share in the division of its wealth, is still too early to say, but it is noteworthy that more and more claims and "reserving of positions" are being made in the lands just south of the Sahara.

The independent states more directly concerned are Morocco and Tunisia, as Algeria's closest neighbors. Already supporting the struggle of their Algerian "brothers" in a more or less open way, and suffering economically from the lack of political stability in the Algerian pivot of North Africa, they must now look forward to an intensification of the war, rather than a quickly negotiated solution. And, as the rebellion continues, the cards are stacked in favor of greater Tuniso-Moroccan help instead of less. Tunisia's position is almost that of open cobelligerence, a position into which it has perhaps been pushed a little unwillingly; Morocco's is more circumspect, but in both cases there is constantly the risk that a small incident will fan the fires to a point out of control. Both Tunisia and Morocco seem to be feeling a stronger pull these days toward the idea of the much-discussed Maghrebian Federation. It is in part insecurity which is pushing them towards it, but they are certainly aware of the attractive new riches which Algeria would bring to such a grouping. It might be questionable, though, whether the shapers of a new Algeria will feel the need to share this with their neighbors -- unless they receive much more military help than they have been getting up to now. In short, the power which the FLN already wields through control of what is probably the most powerful military organization in the Arab world in terms of training, toughness adaptability and numbers (estimates run from 60,000 to 100,000 men), has been heavily increased by the prospect of future economic power. Oil will make Algeria's role in North Africa even more preponderant than it otherwise would have been.

For some time Morocco has been already deeply engaged in Saharan problems, through its recently created Saharan Office and the propaganda campaign being waged by the Istiqlal Party's elder statesman, Allal al Fassi, for its "unredeemed territory" in the desert. With its southeastern frontiers still legally undefined and with dubious historic claims which stretch, or are stretched, down as far as Timbuctoo (conquered by Morocco in the 16th century, and St. Louis du Sénégal on the coast of West Africa, Morocco has made clear that it does not intend to be left out of a division of the spoils. Most irritating to Moroccan nationalist opinion is the quiet but efficient way in which France is proceeding with the organization of the desert regions. The bitter comment of the party newspaper, Al Istiqlal, this week reflects this feeling:

"How can we not be astonished at this moment when we have almost succeeded in separating the issues from the false problems which burdened them, to see the high commission of the OCRS meet, in order to try and give a definitive character to France's seizure of the Sahara, its people and its resources."

The attempts to free the Ifni enclave and the attacks by the Moroccan "Army of Liberation of the Sahara" on Spanish outposts in Rio de Oro are only the first warning signs that action rather than words will probably be resorted to eventually in the Moroccan campaign for its Sahara irredenta.

Tunisia and Libya have no territorial claims in the Sahara, but they are concerned as rivals in the proposed Edjelé pipeline. Libya's position has

been notably improved by the discovery of oil just east of Edjelé and across the frontier from it, in what is likely the same field. It is still being considered for the pipeline but the French are in a frame of mind reluctant to put any country in the position of turning into a potential Syria, as they remember the sabotage of the pipelines from Arabian fields in the 1956 Suez crisis.

Finally, to the relations between the Arab world and the European Common Market, Algerian oil spells future friction. The Arabs, already put out at what they consider a Common Market attempt to freeze them out of European markets, fear a loss of the power they have held over Europe through the combination of oil resources and Suez transit facilities. If Algerian oil in quantity can be shipped across the Western Mediterranean without interference to Europe, European policy towards the Middle Eastern states can afford to take a new, harder tack. As to the Algerians so to the whole Arab world the issue is clearly one of "imperialist exploitation" and already the Voice of the Arabs and the newly-established Afro-Asian Cominform in Cairo are beginning to harp on it.

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This is the Pandora's box which is being opened by the first oil tankcars lumbering across the mountains of eastern Algeria. Looking at future prospects objectively, however, there is one ray of consoling hope. If one considers the enormous problems of demography and underdevelopment now existing in Algeria and all North Africa, it is evident that the oil of the Sahara, if its benefits are properly managed, can be the foundation rock upon which a new and viable Maghreb will be based. It is up to those involved -- including the smaller American companies who have moved in to share in the development -- to consider the total welfare of the people of the area involved. This will require a quite new approach which, at least for the present, there are no signs of. Upon the wisdom of the decisions made by all parties depends the extent of blood and tears to be shed in North Africa in the immediate future.

As the Arab states of North Africa move into the modern world along much the same lines as their predecessors in the Middle East, but with the accelerated rate characteristic of the second half of this century, their center of aspirations is moving inland to the Sahara. To them this great hinterland is a storehouse of mineral resources which will bring them prosperity and pride, and which, inhabited as it is by a more than ninety-nine per cent Muslim population of Berbero-Arab stock, is considered rightfully part of the Greater Maghreb. To the dynamic young leaders of the independent states the challenge of the Saharan future must be what the opening of the Northwest Territory and the Mississippi Basin was to the early American explorers. There is a deep sense of determination and historic destiny in the Arab feeling about the Sahara and, remembering the course of the American movement westward, there will likely be many abuses and much chicanery before the story ends. It is a bitter twist of history that the same France whose Voltaire dismissed the "arpents de neige," the acres of snow that were Canada, and whose Napoleon sold the Louisiana Territory for a pittance, has now decided that it will not surrender the sands of the Sahara. History repeats itself but not always in the same way.

Charles F. Gallagher