
BOSTON UNIVERSITY LAW REVIEW**SEARCH AND SEIZURE BY THE NUMBERS:
THE DRUG COURIER PROFILE AND JUDICIAL REVIEW
OF INVESTIGATIVE FORMULAS†****MORGAN CLOUD***

The reasons for judicial mistrust of the drug courier profile are numerous and, I believe, compelling. Because many of the profile characteristics (e.g. nervousness, arrival from a source city, little or no luggage, cash purchase of ticket) are equally applicable to innocent persons, use of the profile by reviewing courts could lead to approval of wholesale seizures of innocent citizens by police. The accuracy of the profile has never been empirically validated, and profile characteristics appear to vary wildly from airport to airport and case to case, giving the profile a shifting, chameleon-like quality. One DEA agent candidly admitted that the profile consists of anything that happens to be suspicious in a particular case. Little wonder then, that the courts are reluctant to ascribe legal significance to the ever-changing profile characteristics, or to accept as binding a profile which was developed by the very law enforcement officials whose actions the courts are charged to review.¹

Traditional constitutional jurisprudence forbids the use of any "litmus-paper test"² to resolve questions in individual cases arising under the fourth amendment.³ Instead "[e]ach case raising a Fourth Amendment issue must

† © 1985 by Morgan Cloud.

* Assistant Professor of Law, Emory University. B.A., Grinnell College, 1969; M.A., University of Iowa, 1972; J.D., Cornell University, 1977. I would like to thank my colleagues and friends who read and commented on this article at various stages in its evolution. They include Charles Shanor, Abraham Ordovery, Fred McChesney, Gay Haley and Shelby Gennett. I also owe thanks to my research assistants, Mary Bowman, Eleanor Crosby, and Joe Devore for their invaluable help.

¹ *Bothwell v. State*, 250 Ga. 573, 588-89, 300 S.E.2d 137 (Smith, J., dissenting) (citations omitted), *cert. denied*, 463 U.S. 1210 (1983).

² *Florida v. Royer*, 460 U.S. 491, 506 (1983) (plurality opinion) (rejecting any "litmus paper test" for distinguishing a consensual police citizen encounter from a seizure).

³ The fourth amendment provides:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no war-

be judged on its own facts."⁴ The task of making these judgments falls upon the courts because the "scheme of the Fourth Amendment becomes meaningful only when . . . the conduct of those charged with enforcing the laws can be subjected to the more detached, neutral scrutiny of a judge who must evaluate the reasonableness of a particular search or seizure in light of the particular circumstances."⁵

Any attempt to replace this essential case-by-case judicial review of government conduct with a "litmus-paper test" designed to resolve primary fourth amendment issues is questionable. Such an attempt is most suspect when the formula for constitutional decisionmaking is devised not by the courts, but by the police⁶ for use in law enforcement. Judicial approval of such a formula permits law enforcers, the very people whose activities are subject to fourth amendment scrutiny, to define the standards by which their conduct is reviewed. It is difficult to imagine a concept more foreign to traditional fourth amendment jurisprudence, or one more likely to evoke skepticism from the judiciary. Nonetheless, during the past decade the courts have been asked to accept just such a formula. It is the drug courier profile, "an informally compiled abstract of characteristics thought typical of persons carrying illicit drugs."⁷

The drug courier profile was developed in the early 1970's by a single agent of the Drug Enforcement Agency (DEA) for use in investigating commercial air passengers suspected of carrying illegal narcotics.⁸ The profile has become a nationwide law enforcement tool, used in airports in every part of the country⁹ and involved in hundreds of criminal prosecutions.¹⁰ The airport drug courier profile has even spawned "highway drug

rants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

U.S. CONST. amend. IV.

⁴ *United States v. Mendenhall*, 446 U.S. 544, 565 n.6 (1980) (Powell, J., concurring).

⁵ *Terry v. Ohio*, 392 U.S. 1, 21 (1968).

⁶ Unless indicated otherwise, the term "police" will be used to refer to law enforcement officers generically. Reference to specific agencies of state and federal governments will be made where appropriate.

⁷ *United States v. Mendenhall*, 446 U.S. 544, 547 n.1 (1980).

⁸ See *infra* notes 19-20 and accompanying text.

⁹ See *infra* notes 22-25 and accompanying text.

¹⁰ See e.g. *United States v. Waksal*, 709 F.2d 653, 655 (11th Cir. 1983) (Tuttle, J.) ("This case involves another permutation of the extensively litigated question of the propriety of airport stops and searches flowing from the 'drug courier profile.'").

In preparing this study, approximately 175 reported opinions involving the use of the profile in investigations of domestic air travelers at airports were identified for the period January 1975 through January 1984. Even this large number of reported opinions is surely only the tip of the iceberg. It does not reflect, for example, the cases settled by plea bargaining or the many cases never reported in published opinions. See *infra* note 134.

courier profiles" relied on by officers investigating travelers on the nation's roads.¹¹ Use of these investigative formulas has increased dramatically although the government has never demonstrated that the drug courier profile accurately distinguishes drug couriers from innocent travelers. The courts have rarely demanded such proof, often uncritically accepting government claims in support of the profile. No court has been more guilty of these sins of omission than the United States Supreme Court, which has decided three cases construing the use of the drug courier profile.¹² The Supreme Court's opinions are perhaps most noteworthy for reaching contradictory results in spite of remarkably similar facts.¹³

Lax judicial scrutiny of the drug courier profile is disturbing because the cases involving its use play a central role in the contemporary evolution of fundamental fourth amendment theories, particularly those establishing the standards for determining whether the police possessed sufficient information to justify a seizure.¹⁴ The profile's proponents argue vigorously that it provides precisely the information needed to support seizures by identifying the behaviors of drug traffickers. Its opponents complain that the drug courier profile merely lists innocent behaviors, often so nebulously as to permit the police to arbitrarily intrude upon the protected rights of the innocent and

¹¹ See *infra* notes 47-51 and accompanying text.

¹² *Florida v. Royer*, 460 U.S. 491 (1983); *Reid v. Georgia*, 448 U.S. 438 (1980); *United States v. Mendenhall*, 446 U.S. 544 (1980).

¹³ The Court's inconsistency in this area has been noted by commentators. See, e.g., *Fourth Amendment—Airport Searches and Seizures: Where Will the Courts Land?* 71 J. CRIM. L. & CRIMINOLOGY 499 (1980) [hereinafter cited as *Airport Searches and Seizures*]; Note, *Drug Courier Profile Stops and the Fourth Amendment: Is the Supreme Court's Case of Confusion in its Terminal Stage?* 15 SUFFOLK U.L. REV. 217 (1981). See *infra* note 72 and accompanying text.

¹⁴ Some of the theories affected by the profile caselaw are in a sense peripheral to the profile itself, for they could arise in any type of criminal investigation. Nonetheless, the drug courier profile cases have influenced the evolution of the most fundamental fourth amendment theories. For example, these cases have refined the Court's definition of police citizen encounters. *United States v. Mendenhall*, 446 U.S. 544, 551-53 (1980) (construing the three-tier analysis of police citizen encounters first articulated in *Terry v. Ohio*, 392 U.S. 1, 27 (1968)); *Florida v. Royer*, 460 U.S. 491, 497-501 (1983) (same). In addition, the definition of seizures implicating fourth amendment interests articulated in one of the profile cases, *Mendenhall*, 446 U.S. at 554 (opinion of Stewart, J.), has been cited with apparent approval in subsequent fourth amendment cases. E.g., *Reid v. Georgia*, 448 U.S. 438 (1980). The profile cases have also helped to shape constitutional standards concerning the voluntariness of a suspect's consent to a search by government agents, *Mendenhall*, 446 at 557, the interrelationship of the "seizure" definition and "consent" by the suspect, *id.* at 553-56 (opinion of Stewart, J.); *Royer*, 460 U.S. at 497-501 (opinion of White, J.), the quantum of information necessary before a government agent can seize a traveler in an airport, *Reid*, 448 U.S. at 441, and the constitutional standards governing the seizure of luggage at airports, *United States v. Place*, 462 U.S. 696 (1983).

guilty alike. The resolution of this debate will have immediate impact in the narrow area of law enforcement at airports, for it will delineate the boundaries of the privacy interests of countless air travelers. Yet, the theoretical issues raised in the drug courier profile cases are potentially of far greater consequence. Acceptance of the use of investigative formulas like the drug courier profile may well produce changes in fourth amendment theory and methodology which could redefine the constitutional roles of the judiciary and the police.¹⁵

Despite the importance of these constitutional issues, the courts have decided hundreds of drug courier profile cases without answering the fundamental questions raised by its use. This article employs both formal legal analysis and empirical methods to seek answers to two of these questions. First, the article defines the characteristics comprising the drug courier profile. This is necessary because the testimony concerning the profile's composition has varied from case to case and courts have failed either to require a specific definition or to agree upon the behavioral characteristics comprising the profile. The formal analysis of the cases and the empirical results both suggest, however, that a single functional definition of the drug courier profile characteristics exists.¹⁶ Unfortunately, the validity of many of these profile characteristics is questionable because some fail to describe the actual behaviors of drug couriers and others are so vague they permit police officers to act upon impermissibly subjective hunches.

The article also examines the impact of drug courier profile characteristics on courts deciding whether the police possessed sufficient facts to justify investigative seizures.¹⁷ Judicial opinion concerning the constitutional significance of the profile is divided, but the empirical data indicate that the presence of certain profile characteristics influences the rulings on this critical issue. As the number of these characteristics present in a case increases, so does the probability that the court will rule that the police possessed facts sufficient to provide reasonable suspicion justifying an investigative seizure. Because the government has never provided objective proof of the validity of these characteristics, the empirical results emphasize the failure of the courts to subject the profile to meaningful review.

The empirical results are most significant within the relevant theoretical context. Section I provides this framework by examining the history of the drug courier profile in the airports and in the courts. It also reviews the

¹⁵ See *infra* notes 52-65 and accompanying text.

¹⁶ See *infra* notes 119-23 and accompanying text.

¹⁷ Two other important questions about the nature and use of the profile could not be explored because the government has never provided the necessary information. First, it is impossible to determine what justification exists for including any individual characteristic in the profile. Second, no objective information is available to measure whether the profile actually "works" at distinguishing drug couriers from innocent travelers. Incredibly, no one apparently knows whether the profile characteristics, taken singly or in combination, have any inherent validity.

caselaw to identify the formal¹⁸ and informal definitions of the profile characteristics analyzed empirically in Section II. The unavoidable conclusion drawn from the theoretical and empirical analyses is that the drug courier profile cases provide a dramatic example of inadequate judicial review. In the end it is argued that the courts should apply traditional fourth amendment analysis to drug courier profile cases and should ignore claims that the drug courier profile provides a formula for answering fundamental questions of constitutional law.

I. THE DRUG COURIER PROFILE: A HISTORY OF FAILED JUDICIAL REVIEW

A. *The Increasing Use of the Drug Courier Profile in Law Enforcement*

The drug courier profile was first developed in 1974 by agents of the DEA assigned to surveillance duty at the Detroit Metropolitan Airport.¹⁹ Special Agent Paul Markonni is credited with developing the profile while assigned to the DEA's Detroit office,²⁰ and with training other agents in its use.²¹ By

¹⁸ See *infra* notes 120-27 and accompanying text.

¹⁹ See United States' Petition for Certiorari at 2-3 & n.1, *United States v. Mendenhall*, 446 U.S. 544 (1980).

²⁰ See *United States v. Ehlebracht*, 693 F.2d 333, 335 n.3 (5th Cir. 1982) (identifying Markonni as the composer of the profile).

Special Agent Markonni has been a federal officer for approximately fifteen years. Twelve of those years he has been with the Drug Enforcement Administration or its predecessor agencies, while from 1970-73 he was with the Secret Service. He is presently Senior Agent at the Atlanta Airport. He has been in Atlanta since 1977; prior to that time he developed the drug courier profile while assigned to the Detroit airport.

Id.; see also, *United States v. Berry*, 639 F.2d 1075, 1079 n.6 (5th Cir. 1981) (identifying Markonni as the composer of the profile), *vacated*, 670 F.2d 583 (5th Cir. 1982) (en banc); *United States v. Elmore* 595 F.2d 1036, 1039 n.3 (5th Cir. 1979) (citing Markonni's testimony listing the characteristics of the profile), *cert. denied*, 447 U.S. 910 (1980); Defendant's Petition for Certiorari at 3, *Reid v. Georgia*, 448 U.S. 438 (1980); Greene & Wice, *The D.E.A. Drug Courier Profile: History and Analysis*, 22 S. TEX. L.J. 261, 261 n.4 (1981) (citing Goldstein & Hirschorn, *Drug Courier Profiles (A Markonni Nightmare)*, National Ass'n of Criminal Defense Lawyers, Criminal Defense Seminar at 1 n.1 (August 1981)); Lecture by Special Agent Markonni, Emory University School of Law (April 10, 1984).

²¹ See, e.g., *United States v. Van Lewis*, 409 F. Supp. 535, 539 (E.D. Mich. 1976) (ticket agent trained by Markonni to observe suspicious behavior), *aff'd*, 556 F.2d 385 (6th Cir. 1977), *cert. denied*, 434 U.S. 1011 (1978).

Markonni's personal impact in this area is also suggested by the fact that he was involved in twenty percent (18 of 90) of the drug courier profile cases randomly selected from a nationwide sample of opinions studied empirically in the article.

Agent Markonni's work in developing and applying the profile has made him something of a legend in the area, a development that has been duly noted by various federal judges. *United States v. Ehlebracht*, 693 F.2d 333, 353 n.3 (5th Cir. 1982); see

1979 the drug courier profile was in use at over 20 airports.²² The geographic distribution of the cases analyzed indicates that currently the drug courier profile is used by officers stationed in airports from Florida to Washington and from New England to southern California.²³ Quite simply it is a nationwide law enforcement tool.

Police throughout the country utilize the drug courier profile in a generally uniform manner. DEA agents and police officers stationed at airports observe arriving and departing travelers on certain flights. They watch for "characteristics and behavioral traits which, on the basis of their collective experience, have tended to distinguish drug couriers from other passengers."²⁴ When a specific traveler arouses the agents' suspicions, they approach the suspect, identify themselves, ask the suspect to consent to questioning, and ask to see the suspect's identification and ticket.²⁵ If the agents' suspicions are not eliminated during this exchange, they continue to question the suspect and ask him to move to another location within the airport, often a room used by law enforcement officers. The suspect is typically asked at this point to consent to a search of his person, luggage, or

also United States v. Williams, 647 F.2d 588, 589 (5th Cir. 1981) ("In this appeal we are once again asked to determine whether evidence taken pursuant to one of the unerring hunches of the ubiquitous Agent Paul Markonni should have been suppressed on the ground that it was taken in violation of the Fourth Amendment."); United States v. Sentovich, 677 F.2d 834, 835 (11th Cir. 1982). ("The ubiquitous DEA Agent Paul Markonni once again sticks his nose into the drug trade. . . . We now learn that among Markonni's many talents is an olfactory sense we in the past attributed only to canines."); United States v. Berd, 634 F.2d 979, 981 & n.1 (5th Cir. 1981) ("This case presents yet another chapter in the life of DEA Special Agent Paul Markonni. . . ." who "has figured in a host of drug seizure cases that have come before this court.").

²² See United States' Petition for Certiorari at 2, United States v. Mendenhall, 446 U.S. 544 (1980).

²³ The article presents an empirical analysis of opinions from 27 different state and federal courts, including ten United States Circuit Courts of Appeals. These cases were selected randomly from a larger pool of drug courier profile cases decided by courts sitting in California, Connecticut, Florida, Georgia, Hawaii, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nevada, New York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Virginia and Washington.

²⁴ United States' Petition for Certiorari at 3, United States v. Mendenhall, 446 U.S. 544 (1980). These "traits and characteristics" generally describe behaviors which are facially innocent, such as flying from major cities, carrying little or no luggage and using airport telephones. *Id.* at n.2.

²⁵ In addition to employing the drug courier profile for identification of suspects "[t]he DEA and its agents in the field have also developed relatively standard procedures for approaching and questioning individuals suspected of being drug couriers." *Id.* at 3.

both.²⁶ If the suspect voluntarily consents to the police requests at any stage of the transaction, the police are free to continue the investigation.²⁷ If the suspect does not consent and attempts to depart, the police must either allow him to proceed on his way or seize him.²⁸

The drug courier profile comes into play in two ways in this police-citizen transaction. Initially, it may trigger investigative action by arousing the agents' suspicions about a particular traveler. Agents allegedly rely on the profile to identify potential drug couriers.²⁹ In addition, the drug courier profile is a factor the police consider in deciding whether to seize a suspect. The profile's proponents claim that when agents conclude that a suspect conforms to the profile, they possess the information necessary to justify a seizure under the fourth amendment.³⁰

Traditionally seizures governed by the fourth amendment have been con-

²⁶ The profile cases analyzed in this study are replete with descriptions of this procedure. *See e.g.*, *Florida v. Royer*, 460 U.S. 491, 493-95 (1983); *Reid v. Georgia*, 448 U.S. 438, 439 (1980); *United States v. Mendenhall*, 446 U.S. 544, 547 (1980); *United States' Petition for Certiorari at 12, id.* *See also* *United States v. Bailey*, 691 F.2d 1009, 1011-12 (11th Cir. 1982), *cert. denied*, 461 U.S. 933 (1983); *United States v. Van Lewis*, 409 F. Supp. 535, 538-39 (E.D. Mich. 1976), *aff'd* 556 F.2d 385 (6th Cir. 1977), *cert. denied*, 434 U.S. 1011 (1978); Brief for the United States 2-4, *Mendenhall*, 446 U.S. 544 (1980); *infra* note 167 and accompanying text.

²⁷ *See* *Schneekloth v. Bustamonte*, 412 U.S. 218, 222 (1973).

²⁸ *Terry v. Ohio*, 392 U.S. 1 (1968), articulated the fourth amendment classifications of police citizen encounters. These encounters are categorized as either voluntary, and therefore not implicating fourth amendment rights; as "Terry-type stops" requiring reasonable suspicion that a crime is occurring; or as "full-blown arrests" requiring probable cause. *Id.* at 27.

²⁹ For examples of cases in which the profile triggered investigations see *United States v. Waksal*, 709 F.2d 653, 655 (11th Cir. 1983); *United States v. Robinson*, 690 F.2d 869, 871 (11th Cir. 1982); *United States v. Waltzer*, 682 F.2d 370, 371-72 (2d Cir. 1982), *cert. denied*, 463 U.S. 1210 (1983); *United States v. Moore*, 675 F.2d 802, 803 (6th Cir. 1982), *cert. denied*, 460 U.S. 1068 (1983); *United States v. Jodoin*, 672 F.2d 232, 233-34, (1st Cir. 1982); *United States v. Corbitt*, 675 F.2d 626, 628 (4th Cir. 1981); *United States v. Smith*, 574 F.2d 882, 883-84 (6th Cir. 1978); *Sands v. State*, 414 So. 2d 611, 616 (Fla. 3d Dist. Ct. App. 1982); *Pullano v. State*, 169 Ga. App. 377, 377-78, 312 S.E.2d 857, 858-60 (1983); *McAdoo v. State*, 164 Ga. App. 23, 23-24, 295 S.E.2d 114, 116 (1982); *Berry v. State*, 163 Ga. App. 705, 705-06, 294 S.E.2d 562, 563-64 (1982); *Bothwell v. State*, 163 Ga. App. 261, 261, 293 S.E.2d 720, 721 (1982), *aff'd*, 250 Ga. 573, 300 S.E.2d 126, *cert. denied*, 463 U.S. 1210 (1983); *Grant v. State*, 55 Md. App. 1, 6-8, 461 A.2d 524, 525-27 (1983).

³⁰ "In deciding whether to detain a person for questioning it seems to us plainly appropriate—indeed commendable—for an agent to rely not only on his own experience but also on the collective experience of his colleagues and predecessors [embodied in the 'drug courier profile']." *United States' Petition for Certiorari at 17, Mendenhall.*

sidered arrests³¹ which must be based upon facts amounting to probable cause to survive constitutional scrutiny.³² Recently the Supreme Court has recognized another less intrusive category of seizures, the brief investigative detention, or "Terry stop."³³ Even a brief investigative seizure violates the fourth amendment unless the officers possess articulable facts sufficient to provide a reasonable suspicion that the suspect is engaged in criminal conduct.³⁴ The reasonable suspicion standard requires the existence of a quantum of information exceeding a mere hunch but less than probable cause.³⁵

The consensus of judicial opinion is that a traveler's mere conformity to some or all of the profile characteristics does not provide probable cause to arrest.³⁶ The judicial debate concerning the profile's impact therefore has

³¹ *Dunaway v. New York*, 442 U.S. 200, 207-08 (1979).

³² "Probable cause exists where 'the facts and circumstances within their [the officers'] knowledge and of which they have reasonably trustworthy information, [are] sufficient in themselves to warrant a man of reasonable caution in the belief that' an offense is being committed." *Brinegar v. United States* 338, U.S. 160, 175-76 (1949) (quoting *Carroll v. United States*, 267 U.S. 132, 162 (1925)).

³³ In *Terry v. Ohio* the Supreme Court "for the first time recognized an exception to the requirement that the Fourth Amendment seizure of persons must be based on probable cause." 392 U.S. 1, 16 (1968). The Court held that brief investigative seizures, or "stops," constituted an intermediate category of police citizen transaction falling between traditional arrests and consensual encounters. Unlike consensual encounters, which do not implicate fourth amendment interests, these "stops" are regulated by the fourth amendment, and must satisfy its general standard of reasonableness. *Id.* at 19, 20.

³⁴ *Id.* at 21. The Supreme Court held that to "justify . . . the particular intrusion the police officer must be able to point to specific and articulable facts which, taken together with rational inferences from those facts, reasonably warrant that intrusion." *Id.*

³⁵ See, *New Jersey v. T.L.O.*, 105 S. Ct. 733, 743 (1985); *Dunaway v. New York*, 442 U.S. 200, 209-11 (1979); *Delaware v. Prouse*, 440 U.S. 648, 654 (1979); *United States v. Brighoni-Ponce*, 422 U.S. 873, 880 (1975).

³⁶ See *Royer*, 460 U.S. at 507 (plurality opinion); *United States v. Moore*, 675 F.2d 802, 808 (6th Cir. 1982), *cert. denied*, 460 U.S. 1068 (1983); *United States v. Smith*, 574 F.2d 882, 884 (6th Cir. 1978) ("In this Circuit's several examinations of the drug courier profile and the fourth amendment, the rule has emerged that the characteristics of the drug courier profile are not alone enough to provide probable cause to arrest nor necessarily enough to create a reasonable suspicion to stop under *Terry*." (citation omitted); *United States v. Ballard*, 573 F.2d 913, 915 (5th Cir. 1978) ("Nor can it be said that the elements of the courier profile, considered alone or in conjunction with the tip, were sufficient to provide probable cause."); *United States v. Pope*, 561 F.2d 663, 667 (6th Cir. 1977); *United States v. Craemer*, 555 F.2d 594, 597 (6th Cir. 1977); *United States v. McCaleb*, 552 F.2d 717, 720 (6th Cir. 1977); *United States v. Hunter*, 550 F.2d 1066, 1069-70 (6th Cir. 1977); *Sands v. State*, 414 So. 2d 611, 616 (Fla. 3rd Dist. Ct. App. 1982) ("[T]his informal 'drug courier profile' . . . could not constitute probable cause, in itself, for the defendant's arrest . . .").

centered on the reasonable suspicion standard which must be met to justify a *Terry* seizure. Some Justices and judges have argued that the drug courier profile characteristics cannot provide reasonable suspicion.³⁷ Others have concluded that while drug courier profile characteristics alone do not supply reasonable suspicion, they may when supplemented by additional suspicious facts.³⁸ A third group contends that the drug courier profile characteristics alone are sufficient.³⁹

³⁷ See *Royer*, 460 U.S. at 512 (Brennan, J., concurring); *Reid*, 448 U.S. at 441; *Mendenhall*, 446 U.S. at 572 (White, J., dissenting); *United States v. Gooding*, 695 F.2d 78, 83 (4th Cir. 1982) ("We have specifically held that a drug courier profile, without more, does not create a reasonable and articulable suspicion."); *United States v. Moore*, 675 F.2d 802, 808 (6th Cir. 1982), *cert. denied*, 460 U.S. 1068; *United States v. Corbin*, 662 F.2d 1066, 1069 (4th Cir. 1981); *United States v. Jefferson*, 650 F.2d 854, 857 (6th Cir. 1981); *United States v. Allen*, 644 F.2d 749, 752 (9th Cir. 1980); *United States v. Herbst*, 641 F.2d 1161, 1166 (5th Cir. 1981), *cert. denied*, 454 U.S. 851 (1981); *United States v. Goldstein*, 635 F.2d 356, 361 (5th Cir.), *cert. denied*, 454 U.S. 962 (1981); *United States v. Hill*, 626 F.2d 429, 433 n.6 (5th Cir. 1980); *United States v. Cantero*, 551 F. Supp. 397, 403 (N.D. Ill. 1982); *Martinez v. State*, 414 So. 2d 301, 303 (Fla. 4th Dist. Ct. App. 1982); *Laurenzano v. State*, 402 So. 2d 1304, 1305-06 (Fla. 3d. Dist. Ct. App. 1981) (Ferguson, J., dissenting); *State v. Smith*, 164 Ga. App. 142, 146, 296 S.E.2d 473, 480 (1982); *State v. Casey*, 59 N.C. App. 99, 109, 296 S.E.2d 473, 480 (1982) ("[T]he belief that it [defendant's conduct] was indicative of criminal activity afoot was more a 'hunch' than a fair inference . . .").

³⁸ See *United States v. Harrison*, 667 F.2d 1158, 1161 (4th Cir.) ("Although the mere fact that an individual fits a drug courier profile is not sufficient to constitute reasonable suspicion; this fact coupled with other suspicious circumstances may provide the reasonable grounds for suspicion required under the Fourth Amendment.") (citation omitted), *cert. denied*, 457 U.S. 1121 (1982); *United States v. \$73,277, United States Currency*, 710 F.2d 283, 290-91 (7th Cir. 1983); *United States v. Ehlebracht*, 693 F.2d 333, 337 (5th Cir. 1982) (four profile characteristics plus a suspicious bulge in clothing provided reasonable suspicion); *United States v. Nembhard*, 676 F.2d 193, 203 n.8 (6th Cir. 1982) (profile characteristics may be considered as part of totality of circumstances), *cert. denied*, 104 S. Ct. 90 (1983); *United States v. Black*, 675 F.2d 129, 137 (7th Cir. 1982), *cert. denied*, 460 U.S. 1068 (1983); *United States v. Sanford*, 658 F.2d 342, 345-46 (5th Cir. 1981) (but all facts cited are profile characteristics including nervousness, treated as both a profile characteristic and as a supplemental fact); *United States v. Herbst*, 641 F.2d 1161, 1167 (5th Cir.), *cert. denied*, 454 U.S. 851 (1981); *United States v. Vasquez-Santiago*, 602 F.2d 1069, 1072 (2d Cir. 1979) ("There is no claim here that the stop was merely the result of adherence to an official DEA 'profile' of narcotics couriers."), *cert. denied*, 447 U.S. 911 (1980); *United States v. Smith*, 574 F.2d 882, 884 (6th Cir. 1978); *United States v. Pope*, 561 F.2d 663, 667 (6th Cir. 1977); *Yocham v. State*, 165 Ga. App. 650, 651-52, 302 S.E.2d 390, 392 (1983).

³⁹ See *Royer*, 460 U.S. at 525 (Rehnquist, J., dissenting); *United States v. Viegas*, 639 F.2d 42 (1st Cir.) (defendant's conduct, found to provide reasonable suspicion,

Claims that the drug courier profile supplies the facts necessary to permit seizures of air travelers raise difficult fourth amendment issues largely because the drug courier profile describes innocent behaviors not linked to any specific crime. The difficulties are compounded by the fact that these innocuous behaviors undoubtedly are exhibited by a large number of innocent travelers. Although the police sometimes are justified in relying upon ostensibly innocent conduct to justify searches and seizures,⁴⁰ the drug courier profile methodology differs from previously accepted police practices. The profile does not identify conduct which is peculiar to a particular crime or suspect. Instead it focuses on general patterns of behavior. As the following examples illustrate, the types of innocent conduct giving rise to a reasonable suspicion under *Terry* are easily distinguishable from the behaviors contained in the drug courier profile.

Suppose officers in a patrol car receive a police radio dispatch advising them that four men wearing brown coats robbed a nearby bank and escaped in a late model blue Ford. Under *Terry* the officers possess sufficient facts to justify an investigative seizure if they spot a car and passengers matching this description. This is true even though all of the suspects' actions directly observed by the officers, wearing brown coats while traveling in a blue car, are innocent. Because of the crime report the officers have reliable information that a specific crime has been committed and possess precise and articulable facts indicating that these particular individuals may be the ones who committed it.

Even without a tip or crime report police officers may rely on ostensibly innocent behavior where the suspect's acts distinguish him from the public. Conduct not itself amounting to a crime may be suspicious to trained,

was consistent with drug courier profile), *cert. denied*, 451 U.S. 970 (1981); *United States v. Forero-Rincon*, 626 F.2d 218 (2d Cir. 1980) (court's conclusion that the specific profile characteristics present in the case provided reasonable suspicion is questionable in light of the Supreme Court's holding in *Reid*, 448 U.S. 438 (1980)); *Carpenter v. State*, 403 So. 2d 1047, 1049 (Fla. 4th Dist. Ct. App. 1981); *Pullano v. State*, 169 Ga. App. 377, 380, 312 S.E.2d 857, 860 (1983); *Brooker v. State*, 164 Ga. App. 775, 776, 298 S.E.2d 48, 50 (1982) ("Thus, use of the DEA developed Drug Courier Profile can provide sufficient articulable and reasonable suspicion to authorize a 'Terry-type' stop."), *cert. denied*, (1983); *Rasnake v. State*, 164 Ga. App. 765, 768, 298 S.E.2d 42, 45 (1982), *cert. denied*, 462 U.S. 1132 (1983); *Berry v. State*, 163 Ga. App. 705, 709, 294 S.E.2d 562, 566 ("Use of the DEA developed 'drug courier profile' provides sufficient articulable and reasonable suspicion to authorize a 'Terry-type' stop."), *cert. denied*, (1982).

⁴⁰ No one questions the propriety of an arrest where police actually observe the suspects engaging in unequivocal criminal conduct. If officers observe individuals running out of a bank, carrying heavy bags and firing handguns at the bank guards, it is obvious that a crime is in progress and the suspects are committing it. The officers possess facts amounting to probable cause and are entitled, indeed obligated, to arrest the suspects.

experienced law enforcement officers. For example, the specific manner in which two men repeatedly scrutinize a store may be so unique that it distinguishes them from innocent shoppers and pedestrians. An officer who observes their peculiar and distinctive conduct may lawfully subject them to a limited *Terry* stop and frisk if he can articulate specific, objective facts differentiating these men from the general public. The suspects' acts are suspicious precisely because of their singularity, and they provide the officer with more than a generalized suspicion or a hunch.⁴¹

A drug courier profile investigation, however, differs from the preceding examples. The investigating officers generally do not possess any advance information suggesting that a specific crime has been committed nor even that any passenger on a particular flight is carrying drugs. Instead, they operate on the assumption that illegal drugs are carried by some members of the general population of air travelers. Relying on this assumption, the officers observe boarding or deplaning air passengers and attempt to identify drug couriers on the basis of characteristics not unique to the suspects but displayed by many travelers. Based solely upon common and apparently innocent conduct, officers regularly investigate travelers and often seize and search them.⁴²

The profile methodology differs from the preceding examples in another fundamental way. Unlike cases where the suspect's unique conduct is the source of individualized suspicion satisfying fourth amendment standards, investigations based on the drug courier profile are justified by the assumption that the suspect's conduct conforms to the behavior of the class of airport drug couriers. The profile's focus is literally not upon an individual's unique conduct, but upon that conduct's alleged similarity to the behaviors of others.

One can wonder what the response of the Supreme Court might have been if the arresting officer in *Terry v. Ohio*⁴³ had attempted to justify his seizure of the defendants by claiming they fit a national profile of armed robbers, rather than pointing to the facts which distinguished the defendants from all other people on the streets of Cleveland. The Court at the very least would have demanded proof that an identifiable profile existed, that it consisted of specific elements which accurately identified criminals, and that the defen-

⁴¹ See *Terry v. Ohio*, 392 U.S. 1, 27 (1968).

⁴² In *United States v. Mendenhall*, for example, the arresting officer testified that he became suspicious because a traveler flew to Detroit from Los Angeles, was the last passenger to deplane, looked around the airport, changed airlines for a connecting flight to Pittsburgh, failed to claim any luggage before boarding the connecting flight, and appeared to be nervous. 446 U.S. 544, 547 n.1 (1980). None of the acts described by the agent are criminal, all can be explained innocently, and all are undoubtedly exhibited by many air travelers.

⁴³ 392 U.S. 1 (1968).

dants conformed to it. Remarkably, the courts generally have not demanded such proof concerning the drug courier profile.⁴⁴

Although fundamental questions concerning the definition and validity of the airport drug courier profile remain unsettled, law enforcers have recently begun to develop drug courier profiles for use in other settings. Such profiles have been used to justify seizures and searches of people entering the United States,⁴⁵ as well as seizures of suspects in domestic locations. In one case the police claimed the defendant, who was arrested on a city street in his automobile, fit the "profile" of customers of a suspected narcotics dealer because he was a "hispanic male."⁴⁶

The most dramatic extension of the use of profiles is the recent emergence of a "highway drug courier profile" in at least three states.⁴⁷ Predictably,

⁴⁴ As one court complained:

[T]he testimony here does not supply us with enough information from which to judge the profile's reliability. For instance, we have no evidence as to the elements making up the profile, the number of these elements that must be satisfied for the police to conclude that a suspect fits the profile, or the basis for including each element in the profile.

State v. Kennedy, 45 Or. App. 911, 916-17, 609 P.2d 438, 441 (1980), *rev'd*, 290 Or. 493, 624 P.2d 99 (1981).

⁴⁵ See *e.g.*, *United States v. Montoya de Hernandez*, 105 S. Ct. 3304, 3307 (1985); *United States v. Henao-Castano*, 729 F.2d 1364, 1365 (11th Cir. 1984) (customs inspector testified the defendant "fit my profile."); *United States v. Vega-Barvo*, 729 F.2d 1341, 1349 (11th Cir. 1984), *cert. denied*, 105 S. Ct. 597 (1984); *United States v. Mejia*, 720 F.2d 1378, 1380 (5th Cir. 1983); *United States v. Hernandez-Cuartas*, 717 F.2d 552, 553 (11th Cir. 1983); *United States v. Gomez-Diaz*, 712 F.2d 949, 950 (5th Cir. 1983), *cert. denied*, 104 S. Ct. 731 (1984); *United States v. De Gutierrez*, 667 F.2d 16, 17 (5th Cir. 1982); *United States v. Carter*, 590 F.2d 138, 139 (5th Cir.), *cert. denied*, 441 U.S. 908 (1979); *United States v. Olcott*, 568 F.2d 1173, 1175 (5th Cir. 1978); *United States v. Afanador*, 567 F.2d 1325, 1327 (5th Cir. 1978); *United States v. Himmelwright*, 551 F.2d 991, 993 (5th Cir.), *cert. denied*, 434 U.S. 902 (1977).

⁴⁶ *United States v. Ceballos*, 654 F.2d 177, 185-86 (2d Cir. 1981) (the court concluded that including an ethnic characteristic such as this was "an inappropriate attempt to broaden the limited acceptance which has been given to the DEA's drug courier profile in the context of airport Terry stops"); see also, *United States v. Miller*, 589 F.2d 1117, 1129 (1st Cir. 1978) (searches and seizures of abandoned vessel and automobile involved, according to the court, a "profile plus" situation justifying the police conduct), *cert. denied*, 440 U.S. 958 (1979); *Garrett v. Goodwin*, 569 F. Supp. 106, 121 (E.D. Ark., 1982) ("Use of the DEA drug courier profile to conduct a search of a rental truck or trailer or any vehicle, without more, violates the Fourth Amendment.").

⁴⁷ In Georgia the DEA has trained 80 state highway troopers to use a "highway drug courier profile" as part of a program called "Operation Pipeline," which focuses particular attention on cars traveling from Florida. The Atlanta Constitution, May 10, 1985, at 1, col. 1; see also Telephone interview with Special Agent Markonni (May 10, 1985) (confirming newspaper report). The pipeline program was first implemented in New Mexico. *Id.* The Supreme Court of New Mexico recently ap-

such a profile has surfaced in Florida, where it has been referred to in at least one reported appellate court opinion and in a growing number of cases in the trial courts.⁴⁸ Its use by the Florida Highway Patrol appears to be increasing.⁴⁹ The use of the highway profile has produced numerous arrests⁵⁰ and significant controversy, particularly over claims by defense attorneys that it is applied in a racially discriminatory manner.⁵¹ Attempts by law enforcers to expand the use of the profile methodology beyond the narrow limits of airport drug investigations and onto the nation's streets and highways underscore the increasing impact of these investigative formulas upon the constitutional rights of travelers and emphasize the need for independent judicial review of these practices.

B. *The Impact of the Drug Courier Profile on Independent Judicial Review of Fourth Amendment Issues*

The fourth amendment protects individual privacy by limiting government power. The task of interpreting and enforcing fourth amendment rights inevitably has fallen upon the courts. From the Supreme Court's first broad interpretation of the fourth amendment,⁵² to the recent adoption of a "good

proved the use of the highway drug courier profile to justify seizures of automobile travelers. *Cohen v. New Mexico*, 711 P.2d 3 (N.M. 1985), *petition for cert. filed*, 54 U.S.L.W. 3565 (U.S. Feb. 6, 1986) (No.85-1339). A version of the profile has also been utilized in Florida. *See infra* notes 48-49 and accompanying text.

⁴⁸ *Kayes v. State*, 409 So. 2d 1075, 1078 (Fla. 2d Dist. Ct. App. 1981) (application of a drug courier profile to suspects in an automobile not sufficient, without more, to justify a seizure).

⁴⁹ Testimony in one consolidated group of cases indicated that following the introduction of the highway profile in April 1984 the "total apprehensions" of one troop of Florida Highway Patrol officers increased sharply. *Florida v. Williams*, No. 84-5053, slip op. at 4 (15th Jud. Cir., Palm Beach County, Fla. June 26, 1985).

⁵⁰ *See e.g.*, *The Miami Herald*, July 6, 1985, at 18A, col. 1; *The Atlanta Constitution*, May 7, 1985, at 4A, col. 4; *The Palm Beach Post*, March 3, 1985, at C16, col. 1.

⁵¹ For examples of claims of racial bias against blacks in the use of the highway profile see sources cited *supra* note 50.

Critics of the "highway profile" argue that, like the airport drug courier profile, it does not distinguish drug couriers from innocent travelers. After reviewing the use of the highway profile in several cases, one Florida trial judge concluded that the highway drug courier profile characteristics

are so broad and indistinct as to ensnare the innocent as well as the guilty. When you boil the above profile down to its essentials, it covers just about every rental automobile or private automobile with out of state license plates traveling north on the turnpike or I-95.

Florida v. Williams, No. 84-5053, slip op. at 22 (15th Jud. Cir., Palm Beach County Fla. June 26, 1985). *See also*, Defendant's Petition for Certiorari, at 7-11, *Cohen v. New Mexico*, 711 P.2d 3 (N.M. 1985), *petition for cert. filed*, 54 U.S.L.W. 3565 (U.S. Feb. 6, 1986).

⁵² *Boyd v. United States*, 116 U.S. 616 (1886). As one commentator has noted, the

faith" exception to the exclusionary rule in warrant cases,⁵³ the judiciary's duty to enforce the amendment's commands has survived intact and unquestioned.⁵⁴ The fourth amendment proscribes "search and seizure by the police, except under the closest judicial safeguards,"⁵⁵ and requires that the constitutional significance of facts and inferences "be drawn by a neutral and detached magistrate instead of being judged by the officer engaged in the often competitive enterprise of ferreting out crime."⁵⁶ Judicial review of police practices is a fundamental command of the fourth amendment, and is central to fourth amendment methodology. Any practice which limits judicial review thus alters the fundamental nature of traditional fourth amendment jurisprudence.

A basic premise of this judicial review is that "[e]ach case raising a Fourth Amendment issue must be judged on its own facts."⁵⁷ The courts must determine in each case whether a search or seizure has occurred,⁵⁸ whether

amendment "remained for almost a century a largely unexplored territory" until the Court decided *Boyd*. J. LANDYNSKI, SEARCH AND SEIZURE AND THE SUPREME COURT: A STUDY IN CONSTITUTIONAL INTERPRETATION 49 (1966).

⁵³ See *United States v. Leon*, 104 S. Ct. 3405 (1984); *Massachusetts v. Sheppard*, 104 S. Ct. 3424 (1984).

⁵⁴ It is noteworthy that the *Leon* majority emphasized that the narrow rule adopted in that decision would not interfere with the traditional judicial review and regulation of police conduct. The majority stated specifically: "Nor are we persuaded that application of a good faith exception to searches conducted pursuant to warrants will preclude review of the constitutionality of the search or seizure, deny needed guidance from the courts, or freeze Fourth Amendment law in its present state." *United States v. Leon*, 104 S. Ct. 3405, 3422 (1984). The *Leon* majority also stressed that the judiciary must continue "to perform [its] 'neutral and detached' function and not serve merely as a rubber stamp for the police," *id.* at 3417 (quoting *Aguilar v. Texas* 378 U.S. 108, 111 (1964)), and reaffirmed the Supreme Court's traditional preference for searches and seizures conducted pursuant to warrants. Indeed, the preference for prior judicial review of proposed police conduct may help explain, in part, the Court's decision in *Leon*.

⁵⁵ *Harris v. United States*, 331 U.S. 145, 161 (1947) (Frankfurter, J., dissenting).

⁵⁶ *Johnson v. United States*, 333 U.S. 10, 13 (1948). Recognition of the need for judicial review of police practices antedated adoption of the fourth amendment. See *Leach v. Money*, 19 Howell St. Tr. 1001, 1027 (1765), quoted in Amsterdam, *Perspectives on the Fourth Amendment*, 58 MINN. L. REV. 349, 396 (1974) ("[i]t is not fit, that the receiving or judging of the information should be left to the discretion of the officer. The magistrate ought to judge; and give certain directions to the officer. ").

⁵⁷ *United States v. Mendenhall*, 446 U.S. 544, 565 n.6 (1980) (Powell, J., concurring).

⁵⁸ *Terry*, 392 U.S. at 16; see, e.g., *United States v. Jacobsen*, 466 U.S. 109, 122 (1984); *United States v. Place*, 462 U.S. 696, 707 (1983); *Florida v. Royer*, 460 U.S. 491, 497-98 (1983) (White, J., plurality opinion); *Reid v. Georgia*, 448 U.S. 438, 443 (1980) (Powell, J., concurring); *United States v. Mendenhall*, 446 U.S. 544, 552-55 (1980); *Katz v. United States*, 389 U.S. 347, 350-53 (1967).

any seizure was justified by probable cause⁵⁹ or reasonable suspicion,⁶⁰ and whether the scope of the police intrusion was justified by the facts.⁶¹ In short, no "litmus-paper test"⁶² can determine whether or not the police possessed sufficient facts to justify the seizure of an individual.⁶³ The courts, therefore, would be expected to treat any attempt to construct such a "litmus-paper test" or formula with skepticism.

Acceptance of a formula allegedly answering fourth amendment questions would radically alter the judiciary's role. Judges would no longer engage in an independent review of the facts, but would be relegated to monitoring the use of investigative formulas by the police, a task analogous to the function of taking judicial notice of undisputed scientific facts. An illustration of such a diminished judicial role is the mechanical administrative role traffic court judges play when reviewing speeding tickets based upon the use of radar. Once a court accepts the premise that radar accurately identifies speeding motorists, judicial review is limited to determining whether properly functioning radar equipment was used by a trained officer. After this is established, usually by the testimony of the arresting officer, the judge's role is limited. In most cases, all that remains is to impose the penalty.

Similarly, in a drug courier profile case, once the court accepts the initial premise that the profile works—that it identifies drug traffickers sufficiently to justify a seizure—and the prosecution establishes that an officer trained in its use had determined that the traveler conformed to the profile, the scope of the court's reviewing function is circumscribed. The officer's use of the formula satisfies the primary government burden of establishing the necessary fact basis for a seizure. The officer's interpretation of the traveler's behavior will be as free from judicial review as a traffic patrol officer's testimony that the radar apparatus revealed a speeding driver.

A number of factors make the dangers inherent to judicial acceptance of the drug courier profile greater than acceptance of radar.⁶⁴ Unlike radar,

⁵⁹ *Illinois v. Gates*, 462 U.S. 213, 238-39 (1983).

⁶⁰ *Terry*, 392 U.S. at 27.

⁶¹ *Id.* at 29; *see, e.g.*, *United States v. Place*, 462 U.S. 696, 705 (1983); *United States v. Ross*, 456 U.S. 798, 824 (1982); *New York v. Belton*, 453 U.S. 454, 457 (1981); *Chimel v. California*, 395 U.S. 752, 765 (1969).

⁶² *Florida v. Royer*, 460 U.S. 491, 506 (1983) (White, J., plurality opinion) (referring to various types of police citizen encounters).

⁶³ *See supra* notes 33-41 and accompanying text.

⁶⁴ Even a scientifically based investigative technique like radar may not be accurate enough to warrant judicial notice that it provides proof of a critical disputed fact. Evidence is available suggesting that even radar is unreliable. If that is true, the courts err if they accept it as establishing facts bearing upon disputed issues. Judges have occasionally ruled that radar is not a reliable detector of speeders. "When Florida police clocked a speeding banyan tree and a house moving at 28 miles per hour . . . the reports sparked a court hearing and widespread questioning of what had previously been an accepted fact of life . . . the absolute accuracy of police radar." *N.Y. Times*, Nov. 27, 1979, at 1C, col. 6. In *State v. Aguilera*, 48 Fla. Supp. 207

there is no scientific evidence validating the drug courier profile. Unlike radar, the drug courier profile is not used to establish a simple fact of physics, but rather to evaluate complex human behaviors which defy quantification. Unlike radar, which is used in relatively insignificant traffic infraction cases, the drug courier profile is used to answer questions of constitutional import in felony cases where ultimate liberty issues are at stake. Because of these differences the drug courier profile deserves the most careful independent judicial scrutiny, and cannot be relied upon uncritically to establish the justification for seizures.

Independent judicial scrutiny is needed even where the response to the drug courier profile methodology is something less than outright acceptance. A number of courts have adopted an intermediate position, rejecting the idea that the profile alone establishes probable cause or even reasonable suspicion to justify a seizure. These courts typically conclude that the profile characteristics can be taken into account along with other non-profile facts in judging the suspicion attaching to a defendant and his conduct.⁶⁵ Even this narrower approach subtly alters the nature of judicial review of police conduct and ultimately leads to insufficient judicial review. By treating the drug courier profile characteristics as suspicious behaviors to be weighed in the balancing of facts, a court implicitly accords these characteristics some constitutional significance. By accepting the premise that these otherwise innocent behaviors may indicate criminality because they are part of a formula, the courts' evaluation of the totality of circumstances will inevitably be colored by the tacit assumption that at least some factual basis for suspicion was present.

Because of its impact on the exercise of judicial review, courts should carefully evaluate the drug courier profile before permitting it to affect their decisions on vital constitutional issues. Before courts accept the drug courier profile's use they should require the government to define its component elements. Proof that the profile characteristics relied upon were defined in advance of the seizure is an essential first step for effective judicial review. Otherwise the profile can be adjusted to apply to the facts of individual cases after the seizure has occurred. This opens the door to arbitrary police conduct. Officers would be permitted to stop people on a whim, and later justify the seizure by manufacturing a list of profile characteristics consistent with each traveler's behavior. Independent judicial review is an illusion if a new drug courier profile is produced to fit each seizure.

Some judges have recognized this problem and have expressed concern about "the facility with which profile characteristics may be manipulated by

(Dade County Ct. 1979), a speeding conviction was reversed because of radar's unreliability. See generally, Trichter & Patterson, *Police Radar 1980: Has the Black Box Lost Its Magic?*, 11 ST. MARY'S L.J. 829 (1980); Comment, *Radar Speed Detection: Homing in on New Evidentiary Problems*, 48 FORDHAM L. REV. 1138 (1980).

⁶⁵ See *supra* notes 36-39 and accompanying text.

overzealous law enforcement officers."⁶⁶ Such concerns appear justified in light of one agent's testimony "that the profile in a particular case consists of anything that arouses his suspicion."⁶⁷

In addition to demanding a definition of the characteristics comprising the drug courier profile, the courts should require evidence demonstrating the basis for inclusion of each characteristic. Such evidence must demonstrate that the drug courier profile characteristic accurately distinguishes drug traffickers from other travelers. Similarly, the courts need to adopt some standard of "success" for determining whether the profile actually "works" at identifying criminals as well as a method for determining which profile characteristics are in fact incriminatory. Otherwise, the presence of only a few irrelevant profile characteristics will authorize intrusions into the lives of travelers, whenever officers exercising their potentially arbitrary discretion see fit.

A prior systematic review of the profile's predictive validity is particularly important because claims supporting the profile will be self-verifying in individual criminal cases. If evidence of criminality had not been uncovered, there would have been no arrest or prosecution. Thus an analysis of the profile's success cannot be based on the reported criminal cases alone, for they are inevitably skewed in favor of the profile.⁶⁸ Instead, a test of the

⁶⁶ *United States v. Berry*, 670 F.2d 583, 599 (5th Cir. 1982); *see also*, *United States v. Pulvano*, 629 F.2d 1151, 1155 n.1 (5th Cir. 1980) (court expressed concern about allowing the police to rely solely on the profile in stopping citizens).

⁶⁷ *United States v. Chambliss*, 425 F. Supp. 1330, 1333 (E.D. Mich. 1977), *quoted in* *State v. Casey*, 59 N.C. App. 99, 109 n.5, 296 S.E.2d 473, 479 n.5 (1982); *see also*, *Bothwell v. State*, 250 Ga. 573, 588-89, 300 S.E.2d 126, 137-38 (Smith, J., dissenting) ("The reasons for judicial mistrust of the drug courier profile are numerous . . ."), *cert. denied*, 463 U.S. 1210 (1983).

Judicial concern about potential abuse of police discretion permitted by the subjectivity and overbreadth of the profile appears in various cases. *See e.g.*, *United States v. Nembhard*, 676 F.2d 193, 198-201 (6th Cir. 1982) (danger of impermissible racial bias and police perjury discussed), *cert. denied*, 104 S. Ct. 90 (1983); *United States v. Forero-Rincon*, 626 F.2d 218, 225 (2d Cir. 1980) (Feinberg, J., dissenting) (danger of "subjective hunches"); *United States v. Viegas*, 639 F.2d 42, 48 (1st Cir.) (Bownes, J., dissenting) ("DEA agents attempting to fit activities into a drug courier profile may sometimes see things that do not happen and fail to see things that do."), *cert. denied*, 451 U.S. 970 (1981); *cf.* *United States v. Cantero*, 551 F. Supp. 397, 400-02 (N.D. Ill. 1982) (danger that police might adjust testimony to conform to recent caselaw). *But cf.* *United States v. Jodoin*, 672 F.2d 232, 235 n.3 (1st Cir. 1982) (record did not suggest an "arbitrary use of the courier profile").

⁶⁸ The dilemma created by an acceptance of the profile's validity without demanding proof of its reliability should be obvious. Since the individual characteristics contained in the profile generally describe innocent behaviors, any traveler is potentially subject to arbitrary government interference, which is prohibited by the fourth amendment. Before opening this "pandora's box," the courts should require more evidence of the profile's effectiveness than the arresting officer's self-serving testimony that the profile "works."

profile's success must ultimately encompass all investigations utilizing this technique, not simply those resulting in arrests.⁶⁹

The courts have failed to find solutions to any of these fundamental problems in spite of the potential impact of the drug courier profile on individual liberties and the scope judicial review, in spite of the large number of criminal cases involving the profile,⁷⁰ and in spite of the significance of the constitutional issues arising in these cases.⁷¹ Instead they have rendered hundreds of opinions reaching contradictory results based upon conflicting analyses. No court has been more guilty of failing to come to grips with the meaning of the drug courier profile than the United States Supreme Court.⁷²

⁶⁹ See *infra* notes 134-35 and accompanying text.

⁷⁰ See *supra* note 10 and accompanying text.

⁷¹ See *supra* notes 14 & 33 and accompanying text.

⁷² The lower courts have noted the confusion caused by the Supreme Court's inability to resolve these issues. See, e.g., *United States v. Berry*, 670 F.2d 583, 594 (5th Cir. 1982); *United States v. Jefferson*, 650 F.2d 854, 856-57 (6th Cir. 1981); *United States v. Allen*, 644 F.2d 749, 751 n.2 (9th Cir. 1980); *United States v. Forero-Rincon*, 626 F.2d 218, 219 n.3 (2d Cir. 1980); *State v. Grimmatt*, 54 N.C. App. 494, 496-98, 284 S.E.2d 144, 147-48 (1981), *petition for review denied*, 305 N.C. 304, 290 S.E.2d 706 (1982).

A graphic example of the Supreme Court's apparently intractable confusion appears in *Florida v. Royer*, 460 U.S. 491 (1983). While reaffirming that no "litmus paper test" can determine fourth amendment seizure issues because of the variations of facts among cases "[e]ven in the discrete category of airport encounters," *id.* at 506, the plurality accepted the use of such a formula, the drug courier profile, in establishing reasonable suspicion to seize *Royer*, *id.* at 495-96.

The analysis of the drug courier profile in the law reviews has not resolved this confusion. See, e.g., Green & Wice, *supra* note 20; Comment, *Reformulating Seizures—Airport Drug Stops and the Fourth Amendment*, 69 CALIF. L. REV. 1486 (1981); Comment, *Search and Seizure—Airport Drug Seizures: How the Federal Courts Strike the Fourth Amendment Balance*, 58 NOTRE DAME L. REV. 668 (1983); Comment, *Drug Courier Profiles in Airport Stops: Legitimate Equivalents of Reasonable Suspicion?*, 14 SW. U. L. REV. 315 (1984); Comment, *Drug Trafficking at Airports—The Judicial Response*, 36 U. MIAMI L. REV. 91 (1981); Comment, *Mendenhall and Reid: The Drug Courier Profile and Investigative Stops*, 42 U. PITT. L. REV. 835 (1981); Note, *Search and Seizure—Defining the Outer Boundaries of the 'Drug Courier Profile': Florida v. Royer*, 103 S. Ct. 1319 (1983), 17 CREIGHTON L. REV. 973 (1984); Note, *Airport Seizures of Luggage Without Probable Cause: Are They 'Reasonable'?*, 1982 DUKE L.J. 1089; Note, *The Limits of an Investigatory Stop on Grounds Less Than Probable Cause of Individuals Who Display the Characteristics of a Drug Courier Profile*, *Florida v. Royer*, 27 HOW. L.J. 345 (1984); *Airport Searches and Seizures*, *supra* note 13; Note, *State v. Reid: Airport Searches and the Drug Courier Profile in Georgia*, 33 MERCER L. REV. 433 (1981); Note, *United States v. Mendenhall*, 596 F.2d 706 (6th Cir. 1979), 7 N. KY. L. REV. 235 (1980); Note, *United States v. Mendenhall: DEA Airport Search and Seizure*, 16 NEW ENG. L. REV. 597 (1981); Note, *Search and Seizure: Airport Investigatory Stops*, 10 STETSON L. REV. 549 (1981); Note, *supra* note 13; Note, *Criminal Profiles After United States*

C. *The Supreme Court Cases: Do Three Strikes Make an Out?*

The United States Supreme Court has addressed the impact of the drug courier profile on fourth amendment theory directly⁷³ in three cases, *United States v. Mendenhall*,⁷⁴ *Reid v. Georgia*,⁷⁵ and *Florida v. Royer*.⁷⁶ After three attempts, the Court has apparently "struck out," for it has done little to resolve the theoretical questions in this area. The Court's failure to establish some coherent doctrine is all the more striking because of the similarity of the facts in the three cases.

Mendenhall, the first of the triad, found the Court struggling to determine whether the presence of alleged profile characteristics provided reasonable suspicion justifying a brief investigative seizure. The agents testified that they approached Mendenhall, and subsequently decided to prevent her from leaving, because she exhibited characteristics contained in the drug courier profile.⁷⁷ The characteristics relied on by the agents were:

v. *Mendenhall: How Well-founded a Suspicion?*, 1981 UTAH L. REV. 557 (1981); Recent Decision, *Criminal Law: Drug Courier Profiles*, *United States v. Mendenhall*, 5 NOVA L.J. 141 (1980). *But see* Greenberg, *Drug Courier Profiles, Mendenhall and Reid: Analyzing Police Intrusions on Less Than Probable Cause*, 19 AM. CRIM. L. REV. 49 (1981); Latzer, Royer, *Profiles, and the Emerging Three-tier Approach to the Fourth Amendment*, 11 AM. J. CRIM. L. 149 (1983).

⁷³ The ubiquitous profile has played a significant role in other recent Supreme Court decisions where the significance of the profile itself was not the dispositive issue in the case. In *Florida v. Rodriguez*, the opinion does not mention the profile but the government argued that the police possessed reasonable suspicion justifying a stop of the defendant in large part because of his alleged conformity to "the profile characteristics." Brief for Petitioner On Jurisdiction at 32 & app. at 93-95, 105 S. Ct. 308 (1984).

The decision in *United States v. Place* did not turn on an interpretation of the drug courier profile, but a careful reading of the case suggests that this defendant was also identified as a suspect by officers using the profile. 462 U.S. 696 (1983). This supposition is strengthened by the Court's discussion of law enforcement attempts to catch airport drug traffickers, *id.* at 704, and by the statement of facts and legal analysis in the District Court opinion, *United States v. Place*, 498 F. Supp. 1217, 1218-24, (E.D.N.Y. 1980), *rev'd*, 660 F.2d 44 (2d Cir. 1981), *aff'd* 462 U.S. 696 (1983).

A different "profile" was apparently involved in *United States v. Chadwick*, 433 U.S. 1 (1977). Amtrak officials in San Diego alerted federal agents because one of the suspects "matched a profile used to spot drug traffickers." *Id.* at 3. This "profile" is distinguishable from the airport drug courier profile because it was in use at a train depot and the incident occurred in 1973, a year before the drug courier profile was implemented at the Detroit airport.

⁷⁴ 446 U.S. 544 (1980).

⁷⁵ 448 U.S. 438 (1980).

⁷⁶ 460 U.S. 491 (1983).

⁷⁷ See *United States' Petition for Certiorari* at app. 18, *Mendenhall*, 446 U.S. 544, quoting the testimony of Agent Anderson in which he stated he relied on

(1) the respondent was arriving on a flight from Los Angeles, a city believed by the agents to be the place of origin for much of the heroin brought to Detroit; (2) the respondent was the last person to leave the plane, "appeared to be very nervous," and "completely scanned the whole area where [the agents] were standing"; (3) after leaving the plane the respondent proceeded past the baggage area without claiming any luggage; and (4) the respondent changed airlines for her flight out of Detroit.⁷⁸

The District Court concluded that these alleged profile characteristics provided reasonable suspicion for a seizure, and denied the motion to suppress. Mendenhall was convicted of violating federal narcotics laws.⁷⁹ The Sixth Circuit reversed her conviction⁸⁰ and the government petitioned

his observation of the defendant and her behaviors conformed to the drug courier profile. *See id.* at 7-21.

⁷⁸ *Mendenhall*, 446 U.S. at 547 n.1. The case provides an instructive example of the use of the profile methodology. DEA agents assigned to duty at the Detroit Metropolitan Airport observed the defendant, a 22 year old black woman, deplane from a commercial flight originating in Los Angeles. The agents followed the suspect as she walked through the airport. She passed the baggage claim area without picking up any luggage, had her ticket for a connecting flight to Pittsburgh approved, then was approached by the agents as she was walking through the concourse.

They identified themselves as federal agents and asked to see both her identification and her airline ticket, which she produced. After determining that her ticket was issued under an alias, they questioned her about the length of her trip. She stated that she had been in California only two days, at which point one agent identified himself as a federal narcotics agent and the suspect became extremely nervous. The agent then returned the suspect's license and ticket and asked her to accompany him to the airport DEA office for questioning. The office was located up one flight of stairs, about 50 feet from the point of the encounter, and was behind a locked door which the agent had to open with a key.

Once inside the office the agent asked the suspect to permit a search of her person and her handbag and advised her of her right to decline. She responded "Go ahead," and a city policewoman was called to conduct the search. The search occurred in another private room in the office, and was conducted after the policewoman asked the suspect if she consented to the search and received an indication that she did. When the suspect disrobed two packages containing heroin were found hidden in her underwear. At this point the suspect was arrested. *Id.* at 547-49, 561, 563-65; United States' Petition for Certiorari at 4-7, app. 8-27, *Mendenhall*, 446 U.S. 544; Respondent's Brief in Opposition to Petition for Certiorari at 3-5, *Mendenhall*, 446 U.S. 544.

⁷⁹ *Mendenhall* was convicted of violating 21 U.S.C. § 841(a)(1) (1976). The district court opinion denying her motion to suppress is unreported but can be found in United States' Petition for Certiorari at 9(a), *Mendenhall*, 446 U.S. 544.

⁸⁰ *United States v. Mendenhall*, 596 F.2d 706 (6th Cir. 1979). The Court of Appeals held that *Mendenhall* had not consented to the search and that "the so-called drug courier profile does not, in itself, represent a legal standard of probable cause in this Circuit." *Id.* at 707. Since it was relying on a "probable cause" standard, the Court

the Supreme Court for certiorari.⁸¹

In reviewing the case the Supreme Court Justices could not reach a consensus about the impact of the drug courier profile on the existence of reasonable suspicion justifying a prearrest *Terry* stop. Two Justices believed that prior to her arrest the defendant was not seized and therefore did not reach the issue of reasonable suspicion.⁸² Three Justices believed that the issue of whether defendant was seized before her arrest was "extremely close."⁸³ They assumed that a *Terry* stop had occurred but believed the stop

of Appeals apparently had concluded that a "full-blown arrest" of Mendenhall had initially occurred. The Court of Appeals refused to "formulate definitive rules" regarding the use of the drug courier profile since "every single case differs from every other in material degree." *Id.*

⁸¹ The petition was granted at 444 U.S. 822 (1979).

⁸² *Mendenhall*, 446 U.S. at 555 (Stewart, J., joined by Rehnquist, J.). Chief Justice Burger and Justices Blackmun and Powell concurred in the judgment and in all parts of the opinion except II-A, which addressed the "seizure" issue. Whether or not Mendenhall was seized turns upon the definition of seizure applied. The so-called objective test enunciated by Justice Stewart arguably now has been adopted by a majority of the Justices. See *Royer*, 460 U.S. at 501-02 (plurality opinion); W. LAFAVE, SEARCH AND SEIZURE, A TREATISE ON THE FOURTH AMENDMENT § 9.2 (Supp. 1985).

It appears, however, that the Justices have not in fact accepted a true "objective" test of seizures. For example, even when the plurality claimed to have adopted the Stewart objective test in *Royer*, it relied on factors well beyond the scope of his definition of the standard in *Mendenhall*. The plurality opinion in *Royer* emphasized the subjective states of mind of the arresting officers and the defendant in determining that he had been seized. *Royer*, 460 U.S. at 502-03; see *infra* note 199 and accompanying text. It also appears that Justice Stewart's objective test is inconsistent with actual police practices. For example, after applying this test Justice Stewart concluded that Mendenhall was not seized prior to her arrest. *Mendenhall*, 446 U.S. at 555. It is obvious that the arresting DEA agent, on the other hand, believed he had seized the defendant much earlier in the encounter. His testimony at the suppression hearing included the following exchange:

Q: And had she put that identification in her purse and walked away from you, you would have stopped her, wouldn't you, because you wanted to ask her some more questions?

A: Yes.

Q: All right. Now, when you asked her to accompany you to the DEA office for further questioning, if she had wanted to walk away, would you have stopped her?

A: Once I asked her to accompany me?

Q: Yes

A: Yes, I would have stopped her.

Q: She was not free to leave, was she?

A: Not at that point.

United States Petition for Certiorari at app. 18, *Mendenhall*, 446 U.S. 544.

⁸³ *Mendenhall*, 446 U.S. at 560 n.1 (Powell, J., concurring).

was supported by reasonable suspicion.⁸⁴ The four dissenting Justices believed that the defendant had been seized before her arrest and that this intrusion was not justified by reasonable suspicion.⁸⁵

The Justices' varying opinions turned in large part on their respective views concerning the impact of the drug courier profile on fact-based fourth amendment issues. The three concurring Justices reviewed each of the profile characteristics exhibited by Mendenhall and concluded that they constituted facts sufficient to provide reasonable suspicion.⁸⁶ As a result they affirmed her conviction. The four dissenters disagreed, arguing vigorously that Mendenhall's conduct could be exhibited by anyone changing planes in an airport and could not lead even an experienced officer to reasonably suspect that criminal activity was afoot.⁸⁷

In view of the drug courier profile's impact on the outcome of the case, it is remarkable that these opinions did not present a definition of the drug courier profile to permit the Justices to verify independently that the profile accurately described the defendant's actions. The Justices merely accepted government claims that the defendant's conduct was consistent with the profile. The absence of a definition is disturbing because it invites abuse of the profile concept by law enforcers. Agents could easily tailor an undefined profile to fit the facts of each case, a practice suggested by the testimony of the investigating agent in *Mendenhall*.⁸⁸ The simplest way for the courts to avoid such manipulation by the police would be to require that the profile components be defined in advance.⁸⁹

The Supreme Court's quiescent acceptance of government claims that Mendenhall's behavior conformed to "an informally compiled abstract of characteristics"⁹⁰ without establishing a definition of the profile is surprising. The Court's failure to correct this error in its subsequent drug courier profile cases is even more remarkable.

⁸⁴ *Id.* at 560 (Powell, J., concurring).

⁸⁵ *Id.* at 566-77 (White, J., dissenting). Justice White was joined in dissent by Justices Brennan, Marshall and Stevens.

⁸⁶ *Mendenhall*, 446 U.S. at 560, 562, 564-65 (Powell, J., concurring).

⁸⁷ Justice White concluded that "[n]one of the aspects of Ms. Mendenhall's conduct, either alone or in combination, were sufficient to provide reasonable suspicion that she was engaged in criminal activity." *Id.* at 572 (White, J., dissenting).

⁸⁸ The trial court record in *Mendenhall* suggests the danger of such practices. When asked during the suppression hearing to list the characteristics comprising the drug courier profile, the DEA agent described the specific behaviors which he later testified were exhibited by Mendenhall. United States' Petition for Certiorari at app. 8, *Mendenhall*, 446 U.S. 544.

⁸⁹ There is ample precedent for this procedure, for it is precisely what the courts have required in cases involving the airplane "hijacker profile." *See, e.g.,* United States v. Lopez, 328 F. Supp. 1077 (E.D.N.Y. 1971); *see also infra* § I-E 1.

⁹⁰ *Mendenhall*, 446 U.S. at 547 n.1.

The Supreme Court issued its second drug courier profile opinion only a month after the *Mendenhall* decision. In *Reid v. Georgia*,⁹¹ a "case similar in many respects to *United States v. Mendenhall*,"⁹² the narrow issue decided by the Court was whether the drug courier profile provided reasonable suspicion justifying a seizure.⁹³ The state trial court had granted Reid's motion to suppress, but the Georgia Court of Appeals reversed, because the defendant "in a number of respects, fit a 'profile' of drug couriers compiled by the [DEA]," which the state court held justified the stop of the defendant.⁹⁴

Once again the Supreme Court was required to construe the impact of the drug courier profile and once again it failed to take the obvious first step of defining its component elements. This omission is striking because each of the alleged profile characteristics present in *Reid* were different from those relied on in *Mendenhall*. The allegedly suspicious behaviors exhibited in *Reid* were: (1) the suspects arrived from Ft. Lauderdale, considered by the agent to be a principal place of origin of cocaine; (2) the suspects arrived in the early morning, when law enforcement is diminished; (3) the suspects appeared to the agent to be trying to conceal the fact they were traveling together; and (4) the only luggage carried by the suspects were shoulder bags.⁹⁵

The Supreme Court reversed the Georgia court in a per curiam opinion, holding that "the [DEA] agent could not, as a matter of law, have reasonably suspected the petitioner of criminal activity on the basis of these observed

⁹¹ 448 U.S. 438 (1980).

⁹² *Id.* at 442 (Powell, J., concurring).

⁹³ Defendant, petitioning for review of his conviction, defined the Question Presented as:

Whether the establishment of a drug courier profile by law enforcement personnel creates an 'articulable suspicion' upon which law enforcement personnel may intrude upon the freedom of the citizens of the United States in violation of the Fourth Amendment to the United States Constitution.

Defendant's Petition for Certiorari at 3, *id.*

The government defined the Question Presented as:

Does the Fourth Amendment prohibit a law enforcement officer from stopping an individual in order to obtain a person's identity when such a stopping is based upon a compilation of suspicious actions by that individual which correlate with a drug courier profile which is applied to individuals who have recently deplaned?

Brief in Opposition for the Respondent at 1, *id.*

The government acknowledged that defendant was stopped at the Atlanta airport when a DEA agent observed "a pattern of suspicious activity on the Petitioner's part which was in conformity with a 'drug courier profile'" *Id.* at 3.

⁹⁴ *State v. Reid*, 149 Ga. App. 685, 686, 255 S.E.2d 71, 72 (1979). The Georgia Court of Appeals denied Reid's motion for a rehearing and the Georgia Supreme Court denied certiorari.

⁹⁵ *Reid*, 448 U.S. at 441.

circumstances."⁹⁶ The majority concluded that only the fact that Reid walked ahead of his companion and occasionally glanced backward at him related to his individual conduct. The other alleged profile characteristics were so broad that to permit them to be the basis of a seizure would lead to the result that "a very large category of presumably innocent travelers . . . would be subject to virtually random seizures"⁹⁷ The Court concluded that the agent possessed no more than a hunch or inchoate suspicion insufficient to justify a *Terry* stop.⁹⁸ Because the agent lacked reasonable suspicion, the Supreme Court vacated the state court judgment and remanded the case for further proceedings.⁹⁹

At first glance *Reid* appears to settle some of the questions left unanswered in *Mendenhall*, by establishing that a suspect's conformance to the profile does not amount to reasonable suspicion. Eight Justices agreed that on these facts the suspect's alleged conformity to drug courier profile characteristics did not justify a seizure. Unfortunately, a more careful examination of the opinion demonstrates that it answers *none* of the important constitutional issues implicated in the case.

Once again the Justices made no attempt to take the essential first step of defining the characteristics comprising the drug courier profile. This omission is notable because the DEA agent who arrested Reid testified at trial that the drug courier profile consists of eleven characteristics, and enumerated ten.¹⁰⁰ The Court was presented with a specific profile definition and ignored it, a curious decision in light of the dissimilarity between the alleged profile characteristics exhibited by Reid and *Mendenhall* and the agents' conflicting testimony about the profile's composition in these two cases.¹⁰¹

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.* (citing *Terry*, 392 U.S. at 27).

⁹⁹ Justice Powell, joined by Chief Justice Burger and Justice Blackmun, concurred that there was no justification for a seizure, *id.* at 442 n.1 (Powell, J., concurring), but emphasized that the Georgia courts were free to determine whether Reid had been seized during the prearrest encounter. Only Justice Rehnquist dissented, apparently because he believed Reid was not seized prior to his formal arrest. *Id.* at 442 (Rehnquist, J., dissenting). On remand the Georgia Court of Appeal reversed the conviction without opinion. 156 Ga. App. 78, 274 S.E.2d 164 (1980). The Georgia Supreme Court granted certiorari and held that the suspects had not been seized during the initial encounter, therefore the absence of reasonable suspicion was not dispositive, and Reid's conviction was reinstated. 247 Ga. 445, 449-50, 276 S.E.2d 617, 621-22 (1981).

¹⁰⁰ See Defendant's Petition for Certiorari at 3-4, *Reid*, 448 U.S. 438.

¹⁰¹ See *supra* notes 78 & 95 and accompanying text.

The only "characteristics" shared by the defendants in these two cases were that all three were black and after being stopped all became "nervous." State of Georgia's Brief in Opposition to Petition for Certiorari at 4, 5, *Reid*, 448 U.S. 438. The *Reid* majority ignored these similarities. The first factor is obviously an impermissible basis for a seizure, see *Johnson, Race and the Decision to Detain a Suspect*, 93 YALE

Similarly, the Court failed to determine the number or combination of profile characteristics which might ever supply reasonable suspicion. The Court had the opportunity to address this issue directly because the government argued that the investigating officer possessed sufficient articulable facts to seize Reid since his "conduct fulfilled approximately four of the eleven parts of the 'drug courier profile.'"¹⁰² Nonetheless, the Court avoided the issue. Because the Supreme Court failed to determine whether the presence of either more or different profile characteristics might satisfy the fourth amendment, after *Reid* it was still arguable that in a subsequent case other alleged profile characteristics might be held to justify a seizure or search. That case soon appeared.

In *Florida v. Royer*, an air traveler again attracted police attention because his "appearance, mannerisms, luggage and actions fit the so-called 'drug courier profile.'"¹⁰³ Once again the alleged profile-consistent behaviors differed from those described in the prior Supreme Court cases. The profile characteristics cited by the agents were:

- (a) Royer was carrying American Tourister luggage, which appeared to be heavy, (b) he was young, apparently between 25-35, (c) he was casually dressed, (d) appeared pale and nervous, looking around at other people, (e) he paid for his ticket in cash with a large number of bills, and (f) rather than completing the airline identification tag to be attached to checked baggage, which had space for a name, address, and telephone number, he wrote only a name and the destination.¹⁰⁴

After noticing Royer, the detectives pursued a typical profile-based investigation. The resulting search of Royer's suitcases uncovered marijuana¹⁰⁵ and he was charged with felony possession. After the trial judge denied his motion to suppress, Royer pleaded *nolo contendere*, reserving the right to appeal the denial of his suppression motion, and was convicted. The Florida District Court of Appeal, sitting en banc,¹⁰⁶ reversed the conviction, finding that Royer's consent to the search of his suitcases was tainted by an unlawful confinement which exceeded the permissible limits of a *Terry* stop, and

L.J. 214 (1983), and the second is often criticized for its obvious subjectivity.

¹⁰² Brief in Opposition for the Respondent at 9, *Reid*, 448 U.S. 438.

¹⁰³ *Royer*, 460 U.S. at 493 (plurality opinion).

¹⁰⁴ *Id.* at n.2. It is noteworthy that the agents did not cite other characteristics of Royer's behavior commonly appearing in profile formulations. For example, Royer purchased a one-way ticket under an alias and traveled from a major source city, Miami, to a use city, New York. *Id.* at 521 (Rehnquist, J., dissenting).

¹⁰⁵ The investigation in *Royer* is described *id.* at 493-95.

¹⁰⁶ *Royer v. State*, 389 So. 2d 1007, 1019 (Fla. 3d Dist. Ct. App. 1980). On appeal from the trial court's denial of the motion to suppress, a panel of the District Court of Appeal of Florida affirmed Royer's conviction. *Id.* at 1014. Royer's motion for a rehearing en banc was then granted and his conviction was reversed. *Id.* at 1020.

thus could only be justified by a showing of probable cause. The court found that the police did not have probable cause, so the seizure violated the fourth amendment. The state court also ruled that profile characteristics alone do not provide reasonable suspicion.¹⁰⁷

The Supreme Court affirmed the judgment of the Florida court, but the Justices again were sharply divided over the impact of the drug courier profile on the controlling fourth amendment theories. A plurality¹⁰⁸ agreed with the state court that Royer's consent to a warrantless search of his suitcases was tainted because at the time he was subject to an arrest unsupported by probable cause. His motion to suppress therefore had to be granted. The plurality disagreed with the state court, however, on the presence of reasonable suspicion justifying a limited *Terry* stop of Royer before his arrest. They believed that the alleged profile characteristics initially relied upon by the agents, supplemented by the fact that Royer was traveling under an alias—a fact invariably described by the government as a principal profile characteristic—amounted to reasonable suspicion.¹⁰⁹ The *Royer* plurality thus contradicted the decision in *Reid*, which appeared to establish that profile characteristics alone do not constitute reasonable suspicion. Three additional opinions in *Royer* did nothing to resolve this confusion. One Justice concurred only in the result and argued that the alleged profile characteristics Royer displayed were clearly insufficient to establish reasonable suspicion.¹¹⁰ Four Justices dissented in two separate opinions. All four dissenters concluded that the officers' observations of Royer's conduct provided reasonable suspicion.¹¹¹

¹⁰⁷ *Id.* at 1019. The state court specifically addressed the relationship between the drug courier profile and the reasonable suspicion standard for a *Terry* stop, holding that "conformance, without more, to one or more elements of the profile does not amount to articulable suspicion." *Id.* at 1017 n.6 (emphasis deleted). The court also noted that "the weight of authority on the question is that a mere similarity with the contents of the drug courier profile is insufficient even to constitute the articulable suspicion required to justify a *Terry* stop." *Id.* at 1019.

¹⁰⁸ Justice White was joined in his plurality opinion by Justices Marshall, Powell and Stevens. Justice Powell issued a separate concurring opinion.

¹⁰⁹ *Royer*, 460 U.S. at 495-96 n.7, 502, 505-06 n.10 (plurality opinion).

¹¹⁰ Justice Brennan concurred only in the result, arguing not only that the police lacked reasonable suspicion but also that Royer was seized during the initial encounter with the police. He argued persuasively that, "[i]t is simply wrong to suggest that a traveler feels free to walk away when he has been approached by individuals who have identified themselves as police officers and asked for, and received, his airline ticket and driver's license." *Id.* at 512 (Brennan, J., concurring).

¹¹¹ Justice Blackmun, writing for himself, believed that due to the "suspicious circumstances they had noted . . . the officers' conduct was fully supported by reasonable suspicion," *id.*, at 516 (Blackmun, J., dissenting), and that their subsequent conduct satisfied the fourth amendment as well. Justice Rehnquist, joined by Chief Justice Burger and Justice O'Connor, argued that the alleged profile characteristics observed by the police before they approached Royer were alone sufficient

The four separate *Royer* opinions only exacerbated the confusion resulting from the Court's handling of the *Mendenhall* and *Reid* decisions. Most significant was the seeming turnabout on the issue of the relationship of reasonable suspicion to the drug courier profile. In *Reid* eight of the Justices agreed that the alleged profile characteristics relied on by the police did not, as matter of law, amount to reasonable suspicion. Yet in *Royer* eight of the justices took the opposite position, and believed profile characteristics provided the necessary articulable facts.

In spite of this apparent conflict between the Court's opinions, none of the Justices was constrained to answer any of the pressing questions raised by the drug courier profile's use. Again, they failed to define the profile's characteristics or to decide the number of characteristics necessary to justify a seizure.¹¹² Once again the Court failed to demand proof of the profile's validity or evidence demonstrating the basis for including each of the characteristics in the profile. As a result, after issuing ten separate opinions in three different cases, the Supreme Court Justices have left unresolved the problems central to understanding the relationship of the drug courier profile to the fourth amendment. Fortunately, the lower court opinions supply an answer to the most basic of these questions: what characteristics comprise the drug courier profile?

D. *The Search for a Definition of the Profile: The Lower Court Cases*

The most remarkable attribute of the judicial response to the drug courier profile has been the willingness of the courts to accept government claims that a traveler's conduct conformed to the profile in the absence of any specific definition of the characteristics comprising it. Defining the profile is a prerequisite to interpreting its impact on constitutional decisionmaking. For if there are characteristic behaviors which justify intrusions upon interests protected by the fourth amendment because they are common to drug couriers, the government must be able to identify these characteristics in order to rely upon them.

The caselaw demonstrates that the government is generally willing to provide testimony concerning the drug courier profile's composition. The problems result largely from the judiciary's failure to demand substantiation of this testimony. Although some judges have complained about the absence

to establish reasonable suspicion and perhaps even probable cause. *Id.* at 525 (Rehnquist, J., dissenting).

¹¹² Only Justice Rehnquist addressed the question of the profile's effectiveness as a predictor of criminality, and the statistics available were sparse at best. *See id.* at 526 n.6; *see also Mendenhall*, 446 U.S. at 562 (Powell, J., concurring). Both Justices relied on statistics found in *United States v. Van Lewis*, 409 F. Supp. 535, 539 (E.D. Mich. 1976), *aff'd*, 556 F.2d 385 (6th Cir. 1977), *cert. denied*, 434 U.S. 1011 (1978).

of evidence validating the profile,¹¹³ many others have accepted the discrepancies in testimony by agents listing the profile characteristics. Occasionally judges have even embraced the concept that no identifiable definition of the profile exists because there are "infinite" profiles.¹¹⁴

This unquestioning acceptance of the existence of multiple, or even infinite, profiles creates a non sequitur. If there is no central definition against which suspects' behavior can be measured, the concept of a profile defining criminality is meaningless. Characteristics which change from case to case, from city to city, and over time, simply cannot be treated as having any significance as a "profile" of criminal behavior. Without definitional boundaries the police cannot claim that their decisions are supported by a formula significant because it embodies the collective experience of agents throughout the nation.¹¹⁵

The discrepancies among drug courier profile characteristics appearing in various cases cannot be rationalized with the explanation that multiple profiles exist if the validity of these same characteristics depends on the

¹¹³ The profile cases are replete with complaints that the validity of the characteristics has never been established. *See, e.g.*, *Bothwell v. State*, 250 Ga. 573, 588-89, 300 S.E.2d 126, 137 (Smith, J., dissenting) (citations omitted), *cert. denied*, 463 U.S. 1210 (1983). Critics also complain that the profile allows police excessive subjective discretion, *United States v. Waltzer*, 682 F.2d 370, 373 (2d Cir. 1982), *cert. denied*, 463 U.S. 1210 (1983); *United States v. Forero-Rincon*, 626 F.2d 218, 225 (2d Cir. 1980) (Feinberg, J., dissenting), describes only innocent conduct, *see, e.g.*, *Royer*, 460 U.S. at 507 (plurality opinion); *Reid*, 448 U.S. at 441, and changes from case to case, *United States v. Chatman*, 573 F.2d 564, 572 (9th Cir. 1977) (Takasugi, J., dissenting).

¹¹⁴ For example, after noting that the Supreme Court has never defined the legal significance of the drug courier profile, the Maryland Court of Special Appeals wrote: "Of course, the Supreme Court has not told us that and they never will. Indeed, they cannot, for there is no such thing as a single drug courier profile; there are infinite drug courier profiles. The very notion is protean, not monolithic." *Grant v. State*, 55 Md. App. 1, 6, 461 A.2d 524, 526 (1983).

¹¹⁵ Even the Maryland Court of Special Appeals apparently recognized the conundrum caused by the concept of "infinite" profiles. Immediately after denying the existence of a single national profile the court performed a remarkable about-face, stating that "the establishment of the profile by the DEA simply gives us the benefit of the collective expertise of many investigators working nationwide in this sensitive area of law enforcement." *Id.* at 7, 461 A.2d at 526.

Another example of a court unable to decide whether or not the profile is a formally defined entity can be found in *United States v. Black*, 675 F.2d 129, 137 n.1 (7th Cir. 1982), *cert. denied*, 460 U.S. 1068 (1983):

The officers were not relying on the DEA drug courier profile discussed in *Reid* and *Mendenhall*, but rather on the basis of the experience of drug enforcement personnel at O'Hare. Although the homemade profile based on this experience was not highly formalized, there is some indication in the record that the officers relied not only on their personal experience, but on a 'booklet' listing characteristics of drug couriers traveling through O'Hare.

Id.

existence of a uniform nationwide DEA profile. These positions are mutually exclusive. Some lower courts have avoided the issue by simply noting that differing profile definitions have been found in various cases.¹¹⁶ Others have referred to the characteristics described in the Supreme Court cases for a definition of the profile, although those cases do not contain a uniform definition.¹¹⁷

In spite of these judicial vagaries, two specific profile definitions do exist which have been relied on in a large number of the lower court cases. The profiles described in *United States v. Elmore*¹¹⁸ and *United States v. Ballard*¹¹⁹ provide the only uniform definitions available in the caselaw.

The *Elmore* profile, developed by DEA Special Agent Paul Markonni, consists of 11 specific characteristics, seven "primary characteristics" and four "secondary characteristics."¹²⁰ The *Elmore* profile is the most important definition of the drug courier profile for a number of reasons. First, since Agent Markonni is the creator of the profile,¹²¹ his definition is the foundation upon which this area of the law has been built. Second, the characteristics defined in the *Elmore* profile have not changed during the past decade. In the face of concerns that the profile changes from case to case, this definition has remained constant.¹²² Finally, the importance of the *Elmore* profile is

¹¹⁶ See *United States v. Berry*, 670 F.2d 583, 598 n.17 (5th Cir. 1982) (en banc); *United States v. Corbin*, 662 F.2d 1066, 1068 n.2 (4th Cir. 1981); *United States v. Allen*, 644 F.2d 749, 750 n.1 (9th Cir. 1980); *Bothwell v. State*, 250 Ga. 573, 588 n.12, 300 S.E.2d 126, 137 n.12 (Smith, J., dissenting), cert. denied, 463 U.S. 1210 (1983); *State v. Casey*, 59 N.C. App. 99, 109-10 n.5, 296 S.E.2d 473, 480 n.5 (1982).

¹¹⁷ See e.g., *United States v. Garrett*, 627 F.2d 14, 16 n.2 (6th Cir. 1980) (citing *Mendenhall* for the profile's definition).

¹¹⁸ 595 F.2d 1036, 1039 n.3 (5th Cir. 1979), cert. denied, 447 U.S. 910 (1980).

¹¹⁹ 573 F.2d 913, 914 (5th Cir. 1978).

¹²⁰ The primary characteristics are: (1) arrival from or departure to an identified source city; (2) carrying little or no luggage, or large quantities of empty suitcases; (3) traveling by an unusual itinerary, such as a rapid turnaround time for a very lengthy airplane trip; (4) use of an alias; (5) carrying unusually large amounts of currency in the many thousands of dollars, usually on the suspects's person, in briefcases or bags; (6) purchasing airline tickets with a large amount of small denomination currency; and (7) unusual nervousness beyond that ordinarily exhibited by passengers.

The secondary characteristics are: (1) the almost exclusive use of public transportation, particularly taxicabs, in departing from the airport; (2) immediately making a telephone call after deplaning; (3) leaving a false or fictitious callback telephone number with the airline; and (4) excessively frequent travel to source or distribution cities. *Elmore*, 595 F.2d at 1039 n.3.

¹²¹ See *supra* notes 19-21 and accompanying text.

¹²² Although developed by Agent Markonni in the early 1970s, it remains essentially unchanged. The *Elmore* profile is described in terms virtually identical to its earliest descriptions in a recent newspaper interview with Special Agent Markonni. The Atlanta Constitution, May 10, 1985, at 1 col. 1. Special Agent Markonni has confirmed this in private conversations with the author and in a lecture he delivered at the Emory University School of Law, April 10, 1984.

confirmed by the numerous cases which have acknowledged and adopted it as the definition of the drug courier profile.¹²³

The *Ballard* profile is made up of 11 characteristics as well.¹²⁴ Although not bearing the Markonni pedigree, the *Ballard* profile also has played a significant role in the drug courier profile litigation. It has been cited in a number of cases as defining the profile.¹²⁵ In addition, it complements the *Elmore* profile. A majority of the *Ballard* characteristics are shared with the *Elmore* profile. As a result, the two profiles, when taken together, suggest the possible nucleus of a single profile definition based upon shared characteristics.¹²⁶ Because these two profiles appear to have dominated the reported cases numerically as well as theoretically, they are analyzed in detail in Section II of this article.¹²⁷ The existence of the formal definitions may

¹²³ See, e.g., *United States v. Waksal*, 709 F.2d 653, 655 n.2 (11th Cir. 1983); *United States v. Morin*, 665 F.2d 765, 766 n.1 (5th Cir. 1982); *United States v. Berry*, 636 F.2d 1075, 1079 n.6 (5th Cir. 1981) (en banc) (*Berry I*), vacated, 670 F.2d 583 (5th Cir. 1982); cf. *Bothwell v. State*, 250 Ga. 573, 575, 300 S.E.2d 126, 128 (citing the 11 *Elmore* characteristics while relying on *Berry I* to define them), cert. denied, 463 U.S. 1210 (1983).

The *Elmore* profile has been described as containing the profile characteristics most common used in the Fifth Circuit. *United States v. Berry*, 670 F.2d 583, 598-99 (5th Cir. 1982) (en banc) (*Berry II*). Even one court discussing the variation among profiles in the cases referred its readers to *Berry I* "[f]or a complete list of the characteristics in a profile" *United States v. Corbin*, 662 F.2d 1066, 1068 n.2 (1981).

¹²⁴ The eleven characteristics are (1) unusual nervousness; (2) no luggage or very limited luggage; (3) possession of an unusually large amount of cash, especially when in bills of small denominations; (4) unusual itinerary, such as taking circuitous routes from cities known to be source cities for narcotics; (5) arriving from a known narcotics source city; (6) paying for an airline ticket in currency of small denominations; (7) purchasing a one-way ticket; (8) use of an alias; (9) use of a false telephone number on an airline reservation; (10) placing a telephone call immediately upon arrival at the airport; and (11) travel by a known narcotics trafficker. *Ballard*, 575 F.2d at 914.

¹²⁵ See, e.g., *United States v. Berry*, 670 F.2d 583, 594 (5th Cir. 1982) (en banc) (*Berry II*) (citing the separate lines of Fifth Circuit cases diverging under *Elmore* and *Ballard*); *United States v. Sanford*, 658 F.2d 342, 345 n.3 (5th Cir. 1981); *United States v. Allen*, 644 F.2d 749, 750 n.1 (9th Cir. 1980); *State v. Rodriguez*, 32 Wash. App. 758, 760 n.1, 650 P.2d 225, 226 n.1 (1982).

¹²⁶ The characteristics shared by the two profiles are unusual nervousness, little or no luggage, flying from a source city, carrying a large amount of cash, purchase of the airline ticket with cash in small denominations, use of an alias to travel, providing the airline with a false telephone number, and making a telephone call immediately upon arriving at the airport.

¹²⁷ The *Elmore* and the *Ballard* profiles were selected for empirical examination because they are the only formal profiles relied on in a significant number of cases and embody the only coherent profile definitions appearing in the existing caselaw. Both logic and necessity therefore commanded that these two formulas be examined.

assist in developing analytical models permitting effective judicial review of investigative formulas.

E. *Two Models of Judicial Response to Investigative Profiles*

Two alternative methods are available for fashioning a rational judicial response to the drug courier profile. The most obvious approach is to require that the government provide satisfactory empirical evidence that the profile is "valid" and actually "works." Absent such scientific proof, any reliance on the profile is untenable. A second rational response is to ignore the profile in determining whether police actions comport with the fourth amendment. Either approach is preferable to the unsystematic judicial decisionmaking evident in the profile cases. Each method is discussed in the following sections of the article.

1. The Contrasting Example of the "Air Hijacker Profile"

The drug courier profile is not the first attempt by the federal government to employ a profile to identify potential criminals who use commercial air travel to complete their crimes. Five years before Agent Markonni developed his formula, an airport "hijacker profile" was implemented as part of the effort to halt airplane piracy. This hijacker profile provides a model for the development, use and judicial review of such investigative formulas, a model intended to avoid many of the problems inherent in the use of the drug courier profile.

Unlike the drug courier profile, which was created by law enforcement agents working in the field, the hijacker profile was developed by "a Task Force appointed to consider methods of combatting the increasing number of airline hijackings."¹²⁸ The Task Force contained a variety of experts,

The empirical analysis was not limited, however, to these characteristics. Additional miscellaneous characteristics appearing in the Supreme Court and lower court drug courier profile cases were also studied. This analysis ultimately confirmed the primacy of the *Ballard* and *Elmore* profile definitions.

Almost one-half (45) of the defendants in the cases studied were tried in courts lying within the geographic boundaries of the Fifth and Eleventh Circuits. The judges sitting on these two courts have adopted the *Elmore* and *Ballard* profile definitions. See *supra* notes 123-25 and accompanying text. Another 15 of the defendants were tried in the federal courts in Michigan and the Sixth Circuit, where Special Agent Markonni developed the profile and trained other agents in its use. When added to the totals for the Fifth and Eleventh Circuits, it is arguable that approximately sixty per cent of the defendants whose cases were studied empirically were tried in courts relying on or influenced by the *Elmore* or *Ballard* profiles.

¹²⁸ *United States v. Lopez*, 328 F. Supp. 1077, 1082 (E.D.N.Y. 1971). The *Lopez* opinion contains a detailed review of the factual background of the hijacker profile and the antihijacking system. See *United States v. Ruiz-Estrella*, 481 F.2d 723, 724

including psychologists, lawyers, engineers and representatives of the Federal Aeronautics Administration, the Department of Justice and the Department of Commerce. The Task Force attempted to develop procedures which would reduce the threat of hijacking while maximizing passenger access to air travel and minimizing any inconvenience, embarrassment or delay.¹²⁹ The "hijacker profile" was one part of the multi-factor system developed by the Task Force. The system also relied upon public notice of enforcement practices, the use of magnetometers, interviews by airline personnel and federal marshals, and frisks of suspects. The hijacker profile was a critical element of this system because it was used, along with the magnetometer, to make the initial identification of potential hijackers.¹³⁰

Unlike the drug courier profile, the hijacker profile was designed systematically. The Task Force employed social science methodologies to develop the profile.¹³¹ After studying known hijackers, the task force compiled twenty-five to thirty characteristics in which hijackers differed significantly from the air-traveling public. By putting only a few of them together they arguably obtained a reliable combination sharply differentiating potential hijackers from non-hijackers.¹³²

Unlike the drug courier profile, the hijacker profile was tested systematically to measure its validity. These procedures included field tests involving several hundred thousand air travelers as well as the historical application of the profile to known hijackers.¹³³

n.1 (2d Cir. 1973); see also Abramovsky, *The Constitutionality of the Antihijacking Security System*, 22 BUFFALO L. REV. 123 (1972); McGinley & Downs, *Airport Searches and Seizures*, 41 FORDHAM L. REV. 293 (1972); Note, *Airport Security Searches and the Fourth Amendment*, 71 COLUM. L. REV. 1039 (1971).

¹²⁹ United States v. Lopez, 328 F. Supp. 1077, 1082 (E.D.N.Y. 1971).

¹³⁰ *Id.* at 1083.

¹³¹ As noted in one of the early cases approving the use of the antihijack system: The testimony revealed that studies underlying the profile were thorough. Procedures followed in developing it were adequate. Appropriate statistical, sociological and psychological data and techniques were utilized. The profile is a highly effective procedure for isolating potential hijackers.

Id. at 1086.

¹³² *Id.* at 1086.

¹³³ During a test period in 1968 and 1969 the Task Force applied the hijacker profile to a sample of 30 known hijackers apprehended after creation of the profile and determined that over 90% would have met the profile. *Id.* Extensive surveys were also conducted to measure the actual impact of the hijacker profile on the air traveling public. These records were available for examination by the courts reviewing the use of this formula. Two of these surveys involved a total of over 750,000 passengers.

One sample consisting of 500,000 screened passengers showed that only 1,406 satisfied the profile (0.28%). Approximately one-half of those were nevertheless permitted to board immediately after failing to activate the magnetometer, leaving 712, or .14% to be interviewed. Of those interviewed only 283, approximately

The drug courier profile has never been subjected to any comparable process of validation. The government has not conducted any systematic study to determine whether the drug profile has any predictive validity. Indeed, the only evidence of its effectiveness has generally been the testimony of agents who utilize the profile in the field. This testimony is typically deficient because even when agents "were recognized as having made stops in a substantial number of past instances where their suspicions proved to be correct [there was no] evidence as to the number of instances in which innocent passengers had been subjected by them to investigatory stops."¹³⁴

one-third, were actually searched. Therefore, only 0.05% of the sample were ultimately subjected to a preventive weapons frisk. Twenty persons were denied boarding—approximately 1/15 of those searched—and of these, 16 were arrested. In sum, almost everyone (99.86%) of the one-half million persons passed swiftly through the boarding process without even being asked a question and 99.95% boarded without being searched.

In another sample of 226,000 screened passengers .57% were selected as meeting the profile; .28% were interviewed; and .13% were searched. It was reported that none were searched "involuntarily" and only 24 were denied boarding.

Id. at 1084.

¹³⁴ *United States v. Place*, 660 F.2d 44, 48-49 (2d Cir. 1981), *aff'd*, 462 U.S. 696 (1983). The Second Circuit later noted that in this area the standards applied to police conduct

must be judged according to the effect its application would have upon the average innocent passenger, and not, with the aid of 20-20 hindsight, by the success it yielded in uncovering contraband in a particular case. One must take into account the probably countless other cases where the detention without probable cause did not uncover any incriminatory evidence.

Id. See also *Bothwell v. State*, 250 Ga. 573, 588, 300 S.E.2d 126, 137 (Smith, J., dissenting) ("The accuracy of the profile has never been empirically validated . . ."), *cert. denied*, 463 U.S. 1210 (1983).

A typical example of testimony of this nature is found in *Rasnake v. State*, where the court noted that Agent Markonni had testified that three-fourths of the approximately 500 drug related arrests he had made during his 15 years in law enforcement involved use of the drug courier profile. 164 Ga. App. 765, 765, 298 S.E. 2d 42, 43 (1982). *cert. denied*, 462 U.S. 1132 (1983). The court did not discuss the number of encounters or seizures made by Markonni not resulting in arrests. In another case Agent Markonni testified that at the time of his appearance he had worked with DEA airport details for seven years and had participated in "more than 400 arrests of couriers carrying drugs through airports." *United States v. Sanford*, 658 F.2d 342, 343 (5th Cir. 1981), *cert. denied*, 455 U.S. 991 (1982). Again the court failed to note the number of people subjected to investigative stops or searches but not arrested.

The impact of the profile methodology on innocent travelers was not clarified by Agent Markonni's testimony in another case that "eighty percent or better" of the people he stopped were searched, and of that group only about half consented to be searched. *United States v. Berry*, 670 F.2d 583, 608 n.3 (5th Cir. 1982) (Clark, J., dissenting). This does not indicate what percentage of those searched were not carrying drugs nor does it provide a definition of a "stop." Perhaps contact not

Testimony by officers using the drug courier profile actually indicates that the profile is not an accurate predictor of criminality. Police testimony supporting the profile demonstrates that apparently only a small percentage of travelers stopped in profile investigations are ever arrested.¹³⁵ Even the most favorable figures cited by the agents fall short of establishing the drug courier profile's validity.¹³⁶ In the rare instances where the government has provided non-anecdotal evidence purporting to establish the profile's validity, the information has been facially deficient. In particular, the data fails to account for all profile-related police encounters with air travelers and provides no evidence indicating that the profile accurately distinguishes drug couriers from innocent passengers.¹³⁷

considered a "stop" by Agent Markonni would be deemed a seizure by a reviewing court.

The lack of precision demanded by the court in *United States v. Waksal*, speaks for itself: "Officer Capone testified that he has worked the airport-narcotics detail for some time and has made approximately 110 cases from the drug courier profile. He testified that some of the profile cases haven't resulted in arrests and some persons have chosen to leave." 539 F. Supp. 834, 837 (S.D. Fla. 1982) (motion to suppress denied), *rev'd*, 709 F.2d 653 (11th Cir. 1983).

¹³⁵ In one case arising at Chicago's O'Hare Airport, the court calculated that the DEA agent involved in the investigation had arrested only 3-5% of the airport suspects he stopped. *United States v. Moya*, 561 F. Supp. 1, 4 (N.D. Ill. 1981), *aff'd*, 704 F.2d 337 (7th Cir. 1983).

In another case the testimony of the DEA agent involved indicated that arrests were made in only 16-20% of the airport profile encounters he had engaged in over a period of two and one-half years. *United States v. Cantero*, 551 F. Supp. 397, 398 (N.D. Ill. 1982). The failure to arrest indicates that no contraband was found in 80-84% of the encounters. In contrast, the local police narcotics officer involved in the *Cantero* case testified that the suspects were seized in about 50-75 (25-37%) of her 200 airport narcotics encounters during the same two and one-half year period. *Id.* This testimony is consistent with the agent's testimony in an earlier case that she had made 50 stops leading to 10 arrests at O'Hare airport. *United States v. Black*, 675 F.2d 129, 131 (7th Cir. 1982) (her co-officer in that case apparently claimed a success rate of two out of three seizures), *cert. denied*, 460 U.S. 1068 (1983). *But cf.* *State v. Kennedy*, 45 Or. App. 911, 916-17, 609 P.2d 438, 440-41 (1980) (Portland police officer successful in application of profile in 4 out of 4 cases), *rev'd*, 290 Or. 493, 624 P.2d 99 (1981).

¹³⁶ In one case a DEA agent working at LaGuardia airport "estimated that some 60% of the persons identified as having 'profile' characteristics are found to be carrying drugs." *Royer*, 460 U.S. at 526 n.6 (Rehnquist, J., dissenting) (citing *United States v. Price*, 599 F.2d 494, 501, n.8 (2d Cir. 1979)). Though such an unverified "estimate" may be of questionable reliability, even by the agent's calculations fully 40% of the people ostensibly conforming to the profile and apparently subjected to some form of search or other investigation did not carry drugs. It is hard to imagine that an investigative formula could possibly justify searches and seizures when so great a percentage of the people subjected to these intrusions are known in advance to be innocent.

¹³⁷ The leading example is reported in *United States v. Van Lewis*, 409 F. Supp.

Other differences between the two profiles cast doubt on both the validity of the drug courier profile and the extent of the government's actual reliance on it. The first disparity is that the hijacker profile consists of only objective characteristics. Its developers intentionally rejected any characteristics requiring the exercise of subjective judgment by investigators.¹³⁸ Indeed, when the hijacker profile was "updated" unofficially with the addition of criteria which "called for an act of individual judgment" by investigators, the changes in the profile were disavowed by the government. These revisions were repudiated for destroying the "essential neutrality and objectivity of the approved profile."¹³⁹ The inclusion of subjective characteristics was a fundamental error, for "[w]hen elements of discretion and prejudice are interjected [the profile] becomes constitutionally impermissible."¹⁴⁰ If the

535, 539 (E.D. Mich. 1976), *aff'd*, 556 F.2d 385 (6th Cir. 1977), *cert. denied*, 434 U.S. 1011 (1978). During the first 18 months of the profile law enforcement program at the Detroit Airport, the government reported that 141 people were searched during 96 encounters. The searches located drugs in 77 of the searches and 122 people were arrested. The defects in these figures obvious. They do not take into account the suspects who were stopped but not searched, nor travelers who satisfied the profile but were not stopped. The figures indicate only that investigations in which searches were conducted usually located drugs but fail to establish the predictive validity of the profile at distinguishing innocent travelers from the guilty. In addition, since the sample included cases in which investigations were based in part on information derived from other independent police work and tips, the reliability of the profile was not necessarily measured. *Mendenhall*, 448 U.S. at 574 n.11 (White, J., dissenting).

Nevertheless, these figures are cited in two of the Supreme Court drug courier profile cases. See *Royer*, 460 U.S. 491, 526 n.6 (1983) (Rehnquist, J., dissenting) (asserting that the figures cited indicated the "success" of the profile, while noting that "few statistics have been kept on the effectiveness of the 'profile' usage"); *Mendenhall*, 446 U.S. at 562 (Powell, J., concurring) (favorably referring to the same data). *But cf. id.* at 574 n.11 (White, J., dissenting) (significance of these figures discounted).

¹³⁸ *United States v. Lopez*, 328 F. Supp. 1077, 1086, 1097 (E.D.N.Y. 1971).

¹³⁹ *Id.* at 1101.

¹⁴⁰ *Id.* (revisions of the "hijacker profile" compelled the court to grant the defendant's motion to suppress evidence). Critics of the drug courier profile have claimed that it permits officers to rely on their subjective biases. Among the most troublesome of these charges has been the claim that the drug courier profile is applied in ways discriminating against racial minorities. See, e.g., *United States v. Vasquez*, 612 F.2d 1338, 1348 (2d Cir. 1979) (Kaufman, C.J., concurring) ("[I]t has not gone without notice that the vast majority of these 'suspects' have been of Hispanic ancestry . . ."), *cert. denied*, 447 U.S. 907 (1980); Johnson, *supra* note 101; *cf. United States v. Nembhard*, 676 F.2d 193, 198-99 (6th Cir. 1982) (the fact that two black men were of the same race triggered the officer's suspicions), *cert. denied*, 104 S. Ct. 90 (1983). Defense attorneys are raising similar objections to the highway drug courier profile now in use in Florida, claiming it is "predominantly directed against blacks." *The Palm Beach Post*, March 3, 1985, at C16, col. 1.

The cases studied empirically for this article did not provide any definite answer to

courts applied such rigorous constitutional standards to the drug courier profile, it would rarely withstand scrutiny. Characteristics requiring the investigating officers to make subjective judgments, such as gauging the suspect's nervousness, routinely appear in the various drug courier profiles.¹⁴¹

Another difference between the two profiles is, paradoxically, that the government has consistently refused to reveal publicly the hijacker profile's elements. When their constitutionality was challenged, evidence concerning the hijacker profile's characteristics was presented for judicial review during *in camera* proceedings from which the defendants were typically excluded. The government's argument that secrecy was necessary to preserve the profile's usefulness regularly defeated defendants' motions, based on their rights of confrontation, cross-examination and public trial, to require public disclosure of the hijacker profile characteristics.¹⁴²

these charges. Only 2 of the defendants (1.9%) were described as white, 9 (8.7%) were identified as black, 13 (12.6%) were identified as hispanic, while the race of 79 (76.7%) could not be determined. These figures made it difficult to draw any definite conclusions about the possible presence of racial bias in these investigations.

It is interesting to note that the defendants' sex could be determined in all cases. 89 of the defendants (86.4%) were male and only 14 (13.6%) were female. Whether this disparity reflects the composition of the population of drug traffickers or the biases of the investigating officers is impossible to determine, for the cases present no data indicating the composition of the class of airport drug couriers by race or sex.

¹⁴¹ The unreliability of nervousness as an index of criminality is emphasized by the conflicting testimony of three officers in *United States v. Gooding*, 695 F.2d 78, 79 (4th Cir. 1982). Detective Bradley thought the defendant "seemed to be 'nervous, suspicious' as he debarked from the plane and looked up and down the corridors of the concourse." *Id.* This interpretation of the defendant's conduct was contradicted by the other local officer. "Detective Issac, however, by his own later testimony, did not consider that Gooding was acting nervous at any time during the surveillance." *Id.* Two officers observing the same defendant thus reached different conclusions about his behavior involving this important profile characteristic. It is interesting that the DEA agent involved in the case had yet a third and different interpretation of Gooding's behavior. He told one of the local detectives that the suspect "seemed to be 'angry, distraught' over someone's not being there." *Id.*

¹⁴² See e.g., *United States v. Clark*, 498 F.2d 535, 538 (2d Cir. 1974); *United States v. Ruiz-Estrella*, 481 F.2d 723, 725-26 (2d Cir. 1973); *United States v. Miller*, 480 F.2d 1008, 1010 (5th Cir.), *cert. denied*, 414 U.S. 1041 (1973); *United States v. Slocum*, 464 F.2d 1180, 1184 (3d Cir. 1972); *United States v. Bell*, 464 F.2d 667, 670-71 (2d Cir.), *cert. denied*, 409 U.S. 991 (1972). Typically defense counsel were permitted to sit in on the *in camera* hearings, but defendants were excluded.

The extent of the government's commitment to preserving the secrecy of the hijacker profile characteristics is underscored by the facts of *Clark*, where the profile system was no longer in use at the time of the suppression hearing. Nonetheless the government argued, and the court agreed, that the secrecy should be preserved in case the government decided to reactivate the profile for use in the future.

It is possible that hijacker profile characteristics are contained in the drug courier

The government's vigorous efforts to protect the secrecy of the composition of the hijacker profile stand in sharp contrast to its willingness to describe the drug courier profile characteristics in open court, in front of defendants and for publication in reported opinions, as well as in the mass media.¹⁴³ This willingness to publicly reveal the drug courier profile characteristics, when contrasted with the wall of secrecy erected and maintained around the hijacker profile, suggests that the government in fact accords less importance to the drug courier profile as a law enforcement tool. The government appears to be unconcerned that drug couriers will learn the profile characteristics and adapt their behavior accordingly.

Yet another factor distinguishing the government treatment of the two profiles is that the hijacker profile characteristics did not vary from case to case. During the years after its implementation, there was "a continuous process of reevaluation in light of new hijackings and changes in trends of hijacking, [and yet] the original profile has retained validity."¹⁴⁴ The strict adherence to a specific profile definition again stands in contrast to the drug courier profile which, chameleon-like, often changes from case to case to correspond with the facts of the individual defendant's behavior.

The history of the hijacker profile provides a provocative model of the

profile. In *United States v. Riggs*, 474 F.2d 699, 701 (2d Cir.), *cert. denied*, 414 U.S. 820 (1973), the court described the defendant's race, sex and coat, and described her conduct as carrying no luggage, arriving at the Detroit airport with two men, and purchasing three one-way tickets to New York with cash taken from a brown paper bag. The court then noted that she met the profile used as part of a "purported antihijacking investigation." *Id.* Although the opinion does not distinguish the profile characteristics from the independent facts observed by the investigating officers, the similarity of these facts to the drug courier profile characteristics is obvious. This raises the intriguing possibility that the drug courier profile developed by Agent Markonni at the Detroit airport is based in large part upon the characteristics contained in the FAA hijacker profile.

This conjecture is consistent with the fact that many of the prosecutions arising out of the use of the hijacker profile were for possession of drugs uncovered during searches undertaken as part of the antihijack system. *See e.g.*, *United States v. Cyzewski*, 484 F.2d 509, 510-11 (5th Cir. 1973) (marijuana), *cert. denied*, 415 U.S. 902 (1974); *United States v. Skipwith*, 482 F.2d 1272, 1273-74 (5th Cir. 1973) (cocaine); *United States v. Moreno*, 475 F.2d 44, 45-46 (5th Cir.) (heroin), *cert. denied*, 414 U.S. 840 (1973); *Slocum*, 464 F.2d at 1181 (cocaine); *Bell*, 464 F.2d at 668-69 (heroin); *United States v. Lopez*, 328 F. Supp. 1077, 1081-82 (E.D.N.Y. 1971) (heroin).

A significant overlap between the two profiles might indicate that investigators attribute the same characteristic behaviors to hijackers and drug couriers. The use of a single general formula allegedly describing the behaviors of different types of criminals would make the drug courier profile even more subject to question, particularly in light of the absence of any data supporting its independent validity.

¹⁴³ The elements of the *Elmore* profile have even been published on the front page of a major daily newspaper. The *Atlanta Constitution*, May 10, 1985, at 1, col. 1.

¹⁴⁴ *United States v. Lopez*, 328 F. Supp. 1077, 1086 (E.D.N.Y. 1971).

rigor necessary for judicial review of the drug courier profile or any other such investigative formula. Before accepting the use of an investigative formula the courts should, at the very least, require that the government demonstrate that it was systematically designed by a group of qualified experts not limited to law enforcers, and was subjected to ongoing tests which unequivocally demonstrate the formula's effectiveness at identifying criminals.¹⁴⁵ Such evidence has never been presented for the drug courier profile.

This is not to say, however, that such evidence would necessarily validate the use of the drug courier profile, for it differs from the hijacker profile in one unalterable and critical respect. The drug profile is used to combat drug trafficking, a crime whose dangers are remote at the airports where couriers are stopped. In contrast, the hijacker profile was designed to combat the most direct and extreme dangers—the immediate threat posed by air pirates to the lives, health, safety and freedom of innocent air travelers.¹⁴⁶ “[E]valuation of the menace of drug smuggling and use with the threat of skyjacking is logically flawed. Whatever danger drugs may pose to society, to our knowledge no one has ever hijacked or blown up an airplane with drug type contraband.”¹⁴⁷

The ultimate and immediate dangers posed by airplane hijackers may well justify intrusions upon passenger privacy interests. The lesser threat posed by drug traffickers suggests that the dangers attending the use of the drug courier profile simply outweigh the benefits it provides. This may be true in part because, to use a relevant analogy, “permitting *any* use of certain mathematical methods entails a sufficiently high risk of misuse, or a risk of misuse sufficiently costly to avoid, that it would be irrational not to take such misuse into account when deciding whether to permit the methods to be employed at all.”¹⁴⁸

¹⁴⁵ One might well question the predictive validity of the hijacker profile since only 6% of the travelers actually searched were arrested. *See supra* notes 140-42 and accompanying text.

¹⁴⁶ One court noted that “[a]s damnable as drug traffic is, its regulation involves the protection of no special interests like those at play in airport security.” *United States v. Van Lewis*, 409 F. Supp. 535, 542 (E.D. Mich. 1976), *aff'd*, 556 F.2d 385 (6th Cir. 1977), *cert. denied*, 434 U.S. 1011 (1978). *See also*, *United States v. Rogers*, 436 F. Supp. 1, 5 (E.D. Mich. 1976) (“It is clear that the balancing approach developed by the antiskyjacking cases must be tempered with the awareness that the exigencies of public safety are not nearly so great in the drug enforcement operation.”).

¹⁴⁷ *United States v. Beale*, 674 F.2d 1327, 1331 n.5 (9th Cir. 1982)(citations omitted), *cert. denied*, 105 S. Ct. 565 (1984); *see also* *United States v. Cyzewski*, 484 F.2d 509, 511 (5th Cir. 1973) (airplane hijacking has potentially catastrophic consequences); *United States v. Epperson*, 454 F.2d 769, 771-72 (4th Cir.), *cert. denied*, 406 U.S. 947 (1972); *United States v. Collis*, 528 F. Supp. 1023, 1029-30 (E.D. Mich. 1981), *rev'd*, 699 F.2d 832 (6th Cir.), *cert. denied*, 462 U.S. 1119 (1983).

¹⁴⁸ Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 HARV. L. REV. 1329, 1331 (1971) (emphasis in original).

Such dangers are greatest when the method is one like the drug courier profile, which is not based upon scientific principles nor supported by any independent evidence of its efficacy, and which contains essential components easily subject to abuse. It is arguable that if the use of investigative formulas to determine the scope of fundamental constitutional rights is ever justifiable, it is only to combat the most extreme dangers, such as air hijacking.¹⁴⁹ This suggests the need for a different judicial response to investigative formulas like the drug courier profile.

2. The *Rodriguez* Approach: Giving No Deference to Investigative Profiles

An alternative approach to demanding proof of the drug courier profile's reliability is to simply decide each case on its facts without regard to claims that the defendant's behaviors are suspicious because they conform to a profile. This may be the approach adopted by the Supreme court in *Florida v. Rodriguez*.¹⁵⁰ The case involved the use of the drug courier profile by officers stationed at the Miami airport.¹⁵¹ The Florida courts granted the defendant's suppression motion, expressly finding that the defendant "did nothing that would arouse an articulable suspicion in the eyes of . . ." the arresting detectives.¹⁵² The Supreme Court reversed, holding that "the trial court's order as affirmed by the District Court of Appeal reflects a misapprehension of the controlling principles of law governing airport stops enunciated by this Court . . ."¹⁵³

The Supreme Court reviewed the facts and concluded that the initial encounter between the defendant and the police was consensual, and by the

¹⁴⁹ Reviewing courts even questioned the constitutional significance of the hijacker profile. For example, where the defendant fit the hijacking profile, one court stated "no one contends that this statistical survey, which Judge Weinstein in *Lopez* described as identifying an armed individual about 6% of the time, can come close to supplying traditional probable cause for a search." *United States v. Ruiz-Estrella*, 481 F.2d 723, 726 (2d Cir. 1973) (citation omitted). The court did not decide whether conforming to the hijacker profile, without more, provided reasonable suspicion. *Id.* at 729-30. *See, e.g., United States v. Skipwith*, 482 F.2d 1272, 1275 (5th Cir. 1973).

¹⁵⁰ 105 S. Ct. 308 (1984).

¹⁵¹ *See* Brief of Petitioner on Jurisdiction at 32 & app. at 22, 24-25, 30-41, 93-95, *Rodriguez*, 105 S. Ct. 308.

¹⁵² *Rodriguez*, 105 S. Ct. at 310.

¹⁵³ *Id.* (citing *Mendenhall*, 446 U.S. 544 and *Royer*, 460 U.S. 491). This language suggests that some members of the Court may envision a separate fourth amendment category for drug investigations at airports, a possibility not diminished by the next paragraph in the *Rodriguez* opinion. There the Court states that "a temporary detention for questioning in the case of an airport search is reviewed under the lesser standard enunciated in *Terry v. Ohio* and is permissible because of the 'public interest involved in the suppression of illegal transaction in drugs or of any other serious crime.'" *Id.* (quoting *Royer*, 460 U.S. at 498-99) (citation omitted).

time any seizure occurred, it was justified by "articulable suspicion."¹⁵⁴ In reviewing the facts known by the officers the Court emphasized that the detectives were specialists in narcotics investigation. Yet, in spite of the arresting officers' reliance on the drug courier profile,¹⁵⁵ no mention was made of the profile during the Court's discussion of the relevant facts or law of the case.

Significantly, although certain common profile characteristics, flying from Miami and purchasing an airline ticket with cash, were attributed to the defendant early in the *per curiam* opinion, the Court ignored them when listing the facts it found sufficient to provide reasonable suspicion. From the language of the opinion, these principal components of the drug courier profile appear not to have been considered by the Court in deciding whether reasonable suspicion existed.¹⁵⁶

The Court's disposition of *Rodriguez* suggests that a majority of the Justices may be willing to take a new approach to the drug courier profile. They may simply ignore it and review the facts of each case without referring to the drug courier profile for assistance in interpreting the degree of suspicion attaching to a traveler's conduct. This approach to the drug courier profile is suggested in certain Justices' comments in the earlier Supreme Court drug courier profile cases,¹⁵⁷ and has been adopted by a number of lower court judges.¹⁵⁸

A review of the facts of *Mendenhall* demonstrates how this approach works. There the government argued that the agents had reasonable suspicion because the defendant conformed to the drug courier profile. Without the drug courier profile to bolster the government's claims that these characteristics actually identify criminals, the court would review the facts of the case to decide whether flying from Los Angeles to Pittsburgh via Detroit,

¹⁵⁴ *Rodriguez*, 105 S. Ct. at 311.

¹⁵⁵ See Petitioner's Brief on Jurisdiction at 32 & app. at 22, 24-25, 30-41, 93-95, *Rodriguez*, 105 S. Ct. 308.

¹⁵⁶ The result in the case may be explained, in part, by the fact that at the time of the Court's consideration of the case, *Rodriguez* was a fugitive from justice. *Rodriguez*, 105 S. Ct. at 309. Another explanation is that the discussion of the facts in this *per curiam* opinion was simply inartfully written, and did not provide a comprehensive explanation of the majority's interpretation of the facts.

¹⁵⁷ For instance, Justice Brennan analyzed the constitutional import of the profile characteristics in *Royer* without referring to the profile. 460 U.S. at 509-13 (Brennan, J., concurring). Another Justice wrote: "Nor would reliance upon the 'drug courier profile' necessarily demonstrate reasonable suspicion. Each case raising a Fourth Amendment issue must be judged on its own facts." *Mendenhall*, 446 U.S. at 565 n.6 (1980) (Powell, J., concurring).

¹⁵⁸ The lower courts frequently have taken the position that a traveler's conformity to profile characteristics, without more, does not provide reasonable suspicion, and have often stated that the profile characteristics are simply facts to be considered by the courts along with the other facts present in the case. See *supra* note 37 and accompanying text.

deplaning last, visually scanning the airport, changing airlines without claiming luggage, and appearing nervous indicate criminality. Assuming the Court would not be swayed improperly by the fact that contraband ultimately was discovered,¹⁵⁹ the significance of these facts would be judged without the coloration resulting from claims that these behaviors conform to a formula describing criminal behavior.¹⁶⁰

This approach does not prevent agents from relying on legitimate claims of special personal knowledge or expertise in interpreting a suspects' acts. The Supreme Court has often commented that an experienced officer may interpret as suspicious behavior which would seem innocent to the untrained observer,¹⁶¹ and this caveat applies to airport drug investigations.¹⁶² Permitt-

¹⁵⁹ The fruits of a search cannot be used to justify the search under fourth amendment standards. Nonetheless, the possibility that some Justices may be influenced by the discovery of contraband is suggested by occasional statements in the drug courier profile cases. For example, concurring in *Royer*, Justice Powell emphasized that

I write briefly to repeat that the public has a compelling interest in identifying by all lawful means those who traffic in illicit drugs for personal profit. . . . In view of the extent to which air transportation is used in the drug traffic, the fact that the stop at issue is made by trained officers in an airport warrants special consideration.

460 U.S. at 508; *see also id.* at 513 (Blackmun, J., dissenting); *id.* at 520 (Rehnquist, J., dissenting); *Mendenhall*, 446 U.S. at 561 (Powell, J., concurring).

¹⁶⁰ Justice White argued vigorously in dissent that without the imprimatur of the profile *Mendenhall's* conduct had no indicia of criminality. He asserted that observing her deplane last did not indicate criminality. After all, someone must always be last off every flight. The fact that she flew from the nation's third largest city did not justify her seizure, because this would make every person flying from Los Angeles subject to seizure, plainly an unacceptable result in a free society. Similarly, prior to their encounter with the defendant, the agents had learned that she had a legitimate reason for not picking up her luggage, she was ticketed through to another city, and that the airlines had found her ticket to be in order. Her change of airlines could have been intended to take advantage of an earlier connecting flight, a fact the agents did not bother to check before stopping *Mendenhall*. *Mendenhall*, 446 U.S. at 572-73 (opinion of White, J.). Similar criticisms can be made of the agents' conclusion that she acted suspiciously because she "scanned" the room and acted "nervous." Anyone unfamiliar with a particular airport might need to survey a strange room to get her bearings. Many air travelers are nervous, whether because of a fear of flying, time pressures associated with itineraries including connecting flights, or the simple tensions associated with unfamiliar places and activities. *Mendenhall*, 446 U.S. at 572-73 (White, J.).

¹⁶¹ *See Mendenhall*, 446 U.S. at 563 (Powell, J., concurring); *Brown v. Texas*, 443 U.S. 47, 52 n.2 (1979); *Terry*, 392 U.S. at 27.

¹⁶² In *Mendenhall*, for example, it was significant to several Justices that the agents were carrying out a highly specialized law enforcement operation and were experienced narcotic agents. Agent Anderson had been a federal narcotics agent for ten years, had been assigned to the Detroit airport detail for a year, and had been involved in 100 drug related arrests at the time he testified at the *Mendenhall*

ting an officer to utilize specialized personal experience is very different, however, from attempting to justify her individual interpretation of facts by claiming reliance upon a formula developed by other law enforcers throughout the nation.

Similarly, something more is needed to establish the validity of a "litmus-paper test" like the drug courier profile than the fact that it is applied by trained specialists. The legitimacy of the "profile" itself is a fact independent of the experience of the officer applying it. To hold otherwise would be to permit experienced officers to rely on "hunches," a result prohibited by the fourth amendment.¹⁶³

The "*Rodriguez*" approach accommodates the competing individual and institutional interests arising in these cases. It allows individual police officers to rely on specialized training and expertise in carrying out their duties while permitting the courts to judge the degree of suspicion attaching to a traveler's individual behavior without being influenced by claims that an unverified profile validates the police conduct. This approach is consistent with traditional fourth amendment methodology and preserves the reality, and not just the appearance, of independent judicial review.

II. THE EMPIRICAL ANALYSIS

The failure of the judiciary to subject the drug courier profile to rigorous scrutiny has left unanswered a number of fundamental questions. The empirical research presented in this section explores two of these questions and provides possible answers to both. First, the data indicate that a functional definition of the profile exists within the caselaw, and consists of characteristics found in the *Elmore* profile. Unfortunately, it appears that most of the drug courier profile characteristics appearing in the caselaw do not accurately describe the behaviors of actual drug couriers and generally are not relied upon by the police.

Second, the empirical results indicate that in spite of the absence of objective evidence establishing the validity of the drug courier profile characteristics and methodology, the courts have accepted their use by the police. Even more important, the results suggest that the presence of the unsubstantiated profile characteristics has influenced judicial decisions determining the existence of reasonable suspicion. The empirical analysis of the drug courier profile is presented in the remaining sections of the article.

A. *The Empirical Methodology*

The airport drug courier profile cases provide an unusual opportunity to apply quantitative methods to fourth amendment theory. Because "encoun-

suppression hearing. *Mendenhall*, 446 U.S. at 564 (Powell, J., concurring); see also, United States' Petition for Certiorari at app. 7, *Mendenhall*, 446 U.S. 544.

¹⁶³ *Terry*, 392 U.S. at 27.

ters between citizens and police officers are incredibly rich in diversity,"¹⁶⁴ it is generally difficult, if not impossible, to develop quantitative methods to analyze and compare these encounters. Individual cases typically involve different crimes, occurring in differing locations and investigated by officers using a variety of law enforcement techniques. This is true even in a relatively narrow category of police activities, such as searches and seizures involving automobiles.¹⁶⁵ This diversity makes it difficult to quantify the facts of a large number of cases for a comparative empirical analysis of the factors triggering police intervention and the judicial response to that police behavior.¹⁶⁶

In contrast, the airport drug courier cases share essential similarities. All involve the same crime, transporting illegal drugs. All are located in the same physical setting, airports. All involve the use of the same investigative techniques by law enforcers.¹⁶⁷ Since "almost all airport search cases based

¹⁶⁴ *Terry*, 392 U.S. at 13.

¹⁶⁵ Factual dissimilarities often prevent meaningful fact comparisons even within a specific type of case. For example, investigations involving automobiles can occur on lonely country roads, *Michigan v. Long*, 463 U.S. 1032 (1983), on freeways, *New York v. Belton*, 453 U.S. 454 (1981), or on busy city streets, *United States v. Robinson*, 414 U.S. 218 (1973). They can require a protective search for dangerous weapons, *Long*, 463 U.S. 1032, or can merely involve routine traffic stops, *Robinson*, 414 U.S. 218. They can occur at night, *Long*, 463 U.S. 1032; *United States v. Ross*, 456 U.S. 798 (1982), or during the day, *Texas v. White*, 423 U.S. 67 (1975). Because these differences can affect the courts' decisions, quantifying the facts can be nearly impossible.

¹⁶⁶ As a result, studies applying quantitative methods to fourth amendment issues typically present comparative analyses of case results. That is, they have compared the disposition of cases decided on fourth amendment grounds, rather than the facts leading to the initiation of the case investigation. A recent example of interest is the statistical debate concerning the impact of the exclusionary rule upon the disposition of criminal cases. See, e.g., Davies, *A Hard Look at What We Know (and Still Need to Learn) About the 'Costs' of the Exclusionary Rule: The NIJ Study and Other Studies of 'Lost' Arrests*, 1983 AM. B. FOUND. RESEARCH J. 611 (1983); Nardulli, *The Societal Cost of the Exclusionary Rule: An Empirical Assessment*, 1983 AM. B. FOUND. RESEARCH J. 585 (1983); National Institute of Justice, *The Effects of the Exclusionary Rule: A Study in California*, U.S. Dept. of Justice, 1982.

Attempts to develop a broader method for quantifying judicial decisionmaking in fourth amendment cases have occasionally been made. One study devised a methodology in which differing facts were quantified as the independent variables and the judicial determination of the reasonableness of the search based on these factors was treated as the dependent variable. Segal, *Predicting Supreme Court Cases Probabilistically: The Search and Seizure Cases, 1962-1981*, 78 THE AM. POL. SCI. REV. 891 (1984).

¹⁶⁷ The drug courier profile is utilized according to a generally consistent set of procedures. See *supra* note 26 and accompanying text. Additional descriptions of the standard profile investigative procedure can be found in *United States v. Bailey*, 691

on the drug courier profile have interestingly similar facts,"¹⁶⁸ it was possible to identify those facts bearing on the fourth amendment issues relevant to this study and to devise methods for quantifying and analyzing the judicial response to the facts reported in a large number of cases. These facts are available in judicial opinions because the "demand for specificity in the information upon which police action is predicated is the central teaching of the Court's Fourth Amendment jurisprudence."¹⁶⁹ As a result the police must state with particularity the facts justifying their conduct and the courts must perform an "intensive, at times painstaking, case-by-case analysis of these facts."¹⁷⁰

Quantitative analyses of the facts reported in published judicial opinions was carried out according to the following procedures. The three Supreme Court drug courier profile cases and a randomly selected group of lower court cases were reviewed to identify both the facts relevant to the existence and use of the drug courier profile and the significant constitutional issues relating to those facts. A coding schedule containing more than 100 separate issues of fact and law identified in this review was developed. The issues generally fit into the following categories: descriptive facts relevant to the case setting,¹⁷¹ facts about the suspect observed by the investigating

F.2d 1009, 1011-12 (11th Cir. 1982), *cert. denied*, 461 U.S. 933 (1983); *United States v. Smith*, 649 F.2d 305, 307 (5th Cir. 1981), *cert. denied*, 460 U.S. 1068 (1983); *United States v. Fry*, 622 F.2d 1218, 1219 n.1 (5th Cir. 1980); *United States v. Vasquez*, 612 F.2d 1338, 1340-41 (2d Cir. 1979), *cert. denied*, 447 U.S. 907 (1980).

¹⁶⁸ *State v. Grimmer*, 54 N.C. App. 494, 497 n.2, 284 S.E.2d 144, 147 n.2 (1981) (citing 10 cases with similar facts in support of this proposition), *petition for review denied*, 305 N.C. 304, 290 S.E.2d 706 (1982). *See also Royer*, 460 U.S. at 508 (Powell, J., concurring) ("This is an airport 'stop for questioning' case similar in its general setting to that before us in *United States v. Mendenhall* . . ."); *id.* at 520, 524 n.4 (Rehnquist, J., dissenting) ("The facts of this case, which are doubtless typical of those facing narcotics officers in major airports throughout the country . . ."); *id.* at 524 n.4 ("The facts of this case bear a strong resemblance to those we examined in *United States v. Mendenhall* . . ."); *Reid*, 448 U.S. at 442 (Powell, J., concurring) ("This case is similar in many respects to *United States v. Mendenhall* . . ."); *United States v. Patino*, 649 F.2d 724, 728 (9th Cir. 1981) (*Mendenhall* "circumstances quite similar to this case"); *United States v. Lara*, 638 F.2d 892, 896 (5th Cir. 1981) (*Mendenhall* facts "similar to those in the instant case"); *United States v. Fry*, 622 F.2d 1218, 1220 (5th Cir. 1980) ("We have recited the facts in detail because, although the particulars vary, the essentials are identical to those in *United States v. Mendenhall* . . .").

¹⁶⁹ *Terry*, 392 U.S. at 21 n.18 (1968) (citations omitted). *See also Illinois v. Gates*, 462 U.S. 213, 231 (1983); *United States v. Cortez*, 449 U.S. 411, 416-18 (1981); *Brown v. Texas*, 443 U.S. 47, 51 (1979); *Dunaway v. New York*, 442 U.S. 200, 210-11 (1979); *Delaware v. Prouse*, 440 U.S. 648, 661 (1979); *Mapp v. Ohio*, 367 U.S. 643, 655 (1961); *Go-Bart Importing Co. v. United States*, 282 U.S. 344, 357 (1931).

¹⁷⁰ *United States v. Robinson*, 414 U.S. 218, 238 (1973) (Marshall, J., dissenting).

¹⁷¹ These included the court deciding the case, the date of the decision, the drug or other contraband found, the investigating officer's agency, and the time of day.

officers,¹⁷² significant attributes of the police-citizen encounter in the airport,¹⁷³ and court decisions on critical constitutional issues.¹⁷⁴

Data at the nominal level of measurement were generated by categorizing each variable for a range of possible results.¹⁷⁵ Coding criteria were developed for each category and the subject cases were scored accordingly. Each subject case was scored twice, once each by two researchers trained to apply the scoring criteria. In the event of a scoring disagreement for any

¹⁷² These included the suspect's city of arrival or destination; the suspect's city of origin or departure; the type of ground transportation used by the suspect; the suspect's order of deplaning; the suspect's age, sex, race, dress, and type of baggage; whether the baggage was checked and claimed; whether the suspect made telephone calls or used the restroom in the airport; whether the suspect appeared to have a companion; whether the suspect or companions appeared nervous and made eye contact with the officers; the suspect's pace of walking; whether the suspect was a known trafficker and whether the officers received a tip; whether the officer observed suspicious physical clues on the suspect; the means and timing of the suspect's ticket purchase; whether the suspect was carrying a large amount of cash; the suspect's itinerary; whether the suspect gave the airline a false telephone number; and whether the suspect was traveling under an alias.

¹⁷³ These included whether the agents obtained the suspect's ticket and identification and what the agents did with each; whether the officers obtained the suspect's bags; whether the agents asked to search the suspect and his bags and whether consent was given, both at the initial location of contact and also at any subsequent investigative location; whether the police asked the suspect to move to another location; whether the suspect was told he was arrested prior to any search; whether the suspect was advised at any location of his right to refuse to consent to critical police requests; whether the suspect was advised he was free to leave during any stage of the encounter; whether the police exhibited certain overt conduct indicating a seizure of the suspect; the location of any search of the suspect or his possessions; the number of officers and suspects; whether the suspect was allowed to leave while his possessions were seized; whether any special investigative techniques, such as x-rays or canine sniffs, were utilized; whether the suspect confessed or fled; if the suspect fled, whether the police seized him; and the length of the prearrest encounter.

¹⁷⁴ These included holdings on whether or not the encounter was a seizure, the nature of any seizures that occurred, and whether they were justified by sufficient facts or by warrants; whether a suspect's consent to a search or move was voluntary; the treatment of the lower court judgment by the reviewing appellate court; whether the motion to suppress was granted; and whether the members of the court disagreed.

¹⁷⁵ The values assigned are "nominal" because there is no qualitative significance ascribed to the number assigned to a scoring response. For example, in the scoring category "sex," the number "1" was assigned to the response "female" and the number "2" was assigned to "male." This does not indicate that the "male" response is twice as significant as the "female" one, but only provides a method for quantifying the frequency of the appearance of each variable. See D. ARY & L. JACOBS, *INTRODUCTION TO STATISTICS PURPOSES AND PROCEDURES* 13 (1976); F. WILLIAMS, *REASONING WITH STATISTICS* 15 (2d ed. 1979).

category in a case, the coders conferred and reached a consensus. The results of this scoring provided the data base used for the quantitative analysis in this study.

When a variable was not discussed in a case or the value for that variable could not be determined from the opinion, it was coded as "missing." For purposes of this study, the scoring of certain variables, particularly the drug courier profile characteristics, as "missing" is relevant, because it indicates that no reliance was placed on that characteristic, either by the police in justifying their conduct or by the court in reaching its decision. One can assume that if either the police or the courts had considered a characteristic important, that characteristic would have been discussed in the opinion.

Analysis of the cases was conducted as follows. An initial survey identified approximately 200 reported judicial opinions involving the use of the drug courier profile decided during the period January 1975 through January 1984. The initial pool of cases was then reviewed and pared to delete those cases not fitting within defined parameters.¹⁷⁶ After these deletions, the subject cases were selected randomly from the remaining opinions to produce a target population of 100 defendants.¹⁷⁷ Because of the random selection procedure and because several cases involved multiple defendants, 90 separate reported opinions involving 103 defendants were selected for empirical analysis. The opinions studied were decided by 27 different state and federal courts during the period August 1975 through December 1983. The subject cases were then coded according to the procedures and criteria

¹⁷⁶ These included investigations occurring at settings other than airport terminals, those involving suspects entering the United States from foreign countries, and cases where the investigations were conducted over a number of days and important observations were made by the police at locations away from the airports. To avoid replication of data, we also attempted with general success to delete from the pool of cases lower court opinions in those cases for which more than one opinion was published. As a result the pool of available opinions was reduced and two separate opinions were studied empirically for only one criminal case and one defendant.

Some opinions were retained in the pool of cases only after a careful reading demonstrated that the profile methodology was employed in the investigation. Inclusion of these cases was deemed necessary to accurately survey both the use of the profile by police at the airports and the judicial response to these practices.

These included cases where the government did not acknowledge use of the profile. *See, e.g.*, *United States v. Pope*, 561 F.2d 663, 666-67 (6th Cir. 1977) ("Although not admitted in the Government's brief, it is obvious that the agents in this case were acting pursuant to a drug courier profile in singling out Appellant for surveillance."). In other cases the government's reliance on the profile methodology was not discussed by the court. The Supreme Court's opinion in *Rodriguez*, 105 S. Ct. 308 exemplifies the cases in which the profile was a critical part of the investigation and yet was not relied upon by the court. *See supra* notes 150-56 and accompanying text. *See also*, *United States v. Vasquez*, 612 F.2d 1338 (2d Cir. 1979).

¹⁷⁷ For a discussion of random samples see D. ARY & L. JACOBS, *supra* note 175, at 6-7, 288-89; F. WILLIAMS, *supra* note 175, at 39.

discussed above. Analyses were performed to determine the frequency of appearance of each profile characteristic and to examine certain relationships among these characteristics and other variables.

The empirical methods employed, and the results generated, are not intended to provide final answers to the ultimate questions of constitutional theory and methodology studied. Instead they are designed to yield fact-based information providing insight into the use of the drug courier profile in law enforcement and its impact on judicial decisionmaking. The nature of the individual rights protected by the constitution and the concomitant limits placed upon government authority are not readily defined with mathematical precision,¹⁷⁸ and indeed encompass values and theories which defy quantification. Nonetheless, the results yielded by the empirical analysis may assist the development of a fact-based response to the issues raised by the use of the profile, by providing a comprehensive overview unavailable to courts reviewing the facts of individual cases.¹⁷⁹

B. *The Search for a Definition of the Profile: A Frequency Analysis*

The initial goal of the study was to explore the extent to which the police actually rely on the various drug courier profile characteristics described in the cases. Analyses measuring the numeric frequency of the appearance of the drug courier profile characteristics were performed upon selected miscellaneous characteristics accepted by the Supreme Court or by the lower courts and upon the *Elmore* and *Ballard* profile characteristics.

It was hypothesized that the numeric frequency of appearance of individual characteristics would indicate the extent of police reliance on them. If the various characteristics actually describe the behaviors of drug couriers,

¹⁷⁸ The proper role of mathematics in deciding critical legal issues remains unresolved. See, e.g., Tribe, *supra* note 148.

¹⁷⁹ To this extent the study falls within the scope of what Professor Kalven termed the "middle range" of empirical inquiry into issues of legal policy. This middle range lies somewhere between pure value judgments beyond the reach of fact-based proof and issues which are readily quantified precisely because they are so prosaic the empirical evidence only proves what we already know. Kalven, *The Quest for the Middle Range: Empirical Inquiry and Legal Policy*, in *LAW IN A CHANGING AMERICA*, 56 (G. Hazard ed. 1968).

The drug courier profile should be subjected to additional scrutiny involving other systematic methods. These procedures should include field observation of airport drug investigations and review of investigative files and other government records. Such studies could examine directly the impact of the profile methodology on innocent travelers and the predictive validity of the profile as it is employed by the police. They would provide information unavailable for examination of the reported opinions. See *supra* notes 17, 44, 67, 134-36 and accompanying text. Use of such methods to conduct a nationwide study would require, of course, both substantial resources and active cooperation by the government. In contrast, published judicial opinions provide several benefits. They provide an economical and readily available data source. In addition, in spite of their limitations as a data source, the opinions provide a coherent body of information about the judicial response to police practices, which

they should be exhibited by apprehended traffickers. Similarly, if the police actually rely upon the individual characteristics in establishing the facts which justify their investigations, those characteristics should be reported in the opinions. The results of this frequency analysis are presented in the following discussion. The results yielded for the miscellaneous Supreme Court and lower court characteristics are discussed first, followed by the results for the formal *Elmore* and *Ballard* profiles.

1. The Miscellaneous Supreme Court Characteristics

In its three opinions construing the drug courier profile the Supreme Court reviewed a variety of ostensible profile characteristics. Most were contained in the *Elmore* and *Ballard* profiles, but in each case the government relied upon "miscellaneous" characteristics not included in either of the two formal profiles. For the empirical analysis, six of these miscellaneous characteristics, two each from the three cases, were selected for study.¹⁸⁰ The two miscellaneous characteristics selected from *Mendenhall* were: the suspect departed last from the plane and scanned the area where the agents were standing. The coding criteria for the latter characteristic were expanded to include cases where the suspect made eye contact with the agents because this behavior was often described in the lower court cases. The characteristics selected from *Reid* were: the suspects arrived in the early morning hours and tried to conceal the fact they were traveling together. The characteristics selected from *Royer* were: the suspect was young (25-35 years old) and casually dressed.

The results of the frequency analysis of these six characteristics are presented in Figures 1 and 2. Only one of the six characteristics, that the suspect looked around or made eye contact, is attributed to more than one-half of the defendants. Each of the remaining five characteristics are displayed by fewer than 18% of the suspects.

It is disturbing that the only characteristic displayed by more than 50% of the defendants, looking around or making eye contact, is also the most subjective of the group. A court can easily verify the suspect's age or time of arrival, but it has no reliable way of determining whether or not a suspect actually made eye contact with the agent or looked around the airport in some unusual way. This characteristic allows the agents maximum discretion, because their conclusions are essentially unreviewable. Even with this

is inevitably missing from materials focusing solely upon law enforcement activities.

¹⁸⁰ These six characteristics were selected for analysis because the initial case review indicated they appeared most frequently in the lower court cases. Two miscellaneous characteristics appearing in the Supreme Court cases but not selected for empirical analysis were that the suspect changed airlines, *Mendenhall*, 446 U.S. at 547 n.1, and that the suspect failed to complete fully the airline identification tag placed on his suitcase, *Royer*, 460 U.S. at 493 n.2.

FIGURE 1
*Summary of The Miscellaneous
 Supreme Court Characteristics^a*

Characteristic	Number of Defendants (and Percentage of all Defendants)		
	Yes	No	Missing ^b
1. Suspect Looked Around or Made Eye Contact With Officer	55 (53.4%)	9 (8.7%)	39 (37.9%)
2. Suspect Attempted to Conceal Traveling Companion	18 (17.5%)	84 (81.5%)	1 (1.0%)
3. Suspect Traveled During Early Morning Hours	11 (10.7%)	34 (33%)	58 (56.3%)
4. Suspect Dressed in Casual Clothes	10 (9.7%)	2 (1.9%)	91 (88.4%)
5. Suspect the Last Passenger to Deplane	5 (4.9%)	9 (8.7%)	89 (86.4%)
6. Suspect Young ^c	8 (7.8%)	2 (1.9%)	93 (90.3%)

^a The empirical results presented in all figures in the article were determined by analyzing 90 published judicial opinions, some involving more than one defendant, for a total of 103 observations.

^b "Missing" refers to cases in which the characteristic was not discussed or could not be determined from the opinion. The "missing" category is used in all figures contained in the article. For purposes of these frequency analyses a "missing" response indicates that the characteristic was not attributed to the defendant.

^c Suspects described as "young" or 35 years old or younger conformed to this characteristic.

subjective characteristic, however, nearly one-half of the defendants, 48 (46.4%), failed to conform to it.

The results are worse for the other five characteristics in this group. The behavior of attempting to hide the presence of a traveling companion is second in frequency, 18 (17.5%), yet almost the same number of defendants, 17 (16.5%), traveled with companions without trying to conceal this fact. This contradicts the characteristic's underlying premise that couriers traveling together attempt to disguise their relationship. In addition, 67 (65%) of the drug couriers traveled alone. The accuracy of this characteristic at describing the behavior of drug couriers must be questioned.

Similar doubts exist for each of the other characteristics in this group. Almost twice as many of the defendants 9 (8.7%), deplaned first rather than last 5 (4.9%), and this characteristic was missing for 89 (86.4%) of the defendants. The lower courts have occasionally noted that police testimony

FIGURE 2
*Breakdown of the Miscellaneous
 Supreme Court Characteristics*

Characteristic	Number of Defendants	Percentage of All Defendants
1. Suspect Looked Around or Made Eye Contact with Officer		
Yes	55	53.4%
No	9	8.7%
Missing	39	37.9%
2. Suspect Attempted to Conceal Traveling Companion		
Yes	18	17.5%
No—travelling with companion, but no attempt to conceal	17	16.5%
No—travelling alone	67	65.0%
Missing	1	1.0%
3. Arrival During Early Morning Hours		
Yes—Midnight—8:00 a.m.	11	10.7%
No—8:01 a.m.—5:00 p.m.	25	24.3%
No—5:01 p.m.—midnight	9	8.7%
Missing	58	56.3%
4. Suspect Dressed in Casual Clothes		
Yes—Casual Clothes	10	9.7%
No—Well-dressed	2	1.9%
Missing	91	88.4%
5. Suspect Last Passenger to Deplane		
Yes—Last Passenger	4	3.9%
Yes—In Last Group	1	1.0%
No—First Passenger	6	5.8%
No—In First Group	3	2.9%
Missing	89	86.4%
6. Suspect Young (35 Years Old or Younger)		
Yes—Young	4	3.9%
Yes—20-25	0	0.0%
Yes—26-30	3	2.9%
Yes—31-35	1	1.0%
No—36-45	1	1.0%
No—46-Older	0	0.0%
No—Middle-Aged	1	1.0%
No—Old	93	0.0%
Missing	93	90.3%

concerning this behavior has been contradictory,¹⁸¹ and these results suggest that officers indeed may have manipulated this profile characteristic to fit the facts of individual cases.

In *Reid*, the government claimed that drug couriers travel during early morning hours when law enforcement is reduced, yet more than three times as many defendants were arrested during "normal" travel hours than during this allegedly suspicious time period. For coding purposes "early morning hours" was defined as the period of time between midnight and 8:00 a.m. Although these figures may demonstrate that increased law enforcement efforts during the typical workday account for the greater number of traffickers caught traveling during those hours, the converse may well be true. Most couriers may fly during "normal" hours. Because of the absence of any data from the government substantiating the validity of this characteristic, it is impossible to determine the time of day most traffickers travel. If the government actually believes drug traffickers fly during these early morning hours, however, one would anticipate an increase in law enforcement efforts during those time periods with a concomitant increase in arrests.

The suspects' ages also did not appear to be a factor in law enforcement decisions. Only 8 defendants were "young," 20-35 years old, while two were older than the "suspect" age group and the ages of 93 defendants were not discussed.

The results of the frequency analysis of this group of six miscellaneous characteristics suggest that the Supreme Court failed to conduct effective judicial review in its three opinions construing the drug courier profile. The court accepted government claims that these miscellaneous behaviors were part of the profile, yet the empirical data indicate that five of the six characteristics do not describe the behavior of 80-95% of drug couriers. Only one behavior, looking around or making eye contact with the officers, was exhibited by as many as one-half of the drug couriers, and it permits police to make subjective judgments essentially unreviewable by the courts. The data demonstrate the need for both a coherent definition of the profile and objective evidence of the validity of its characteristics. This area of constitutional litigation will apparently remain confused until such evidence is required by the courts.

¹⁸¹ That Defendant was among the first to disembark is also of little importance, especially in light of the fact that DEA agents, in other cases, have considered (1) the last passenger to disembark as indicia of criminal conduct, *United States v. Vasquez*, 612 F.2d 1338 (2d Cir. 1980), (2) one of them middle of a line of deplaning passengers, *United States v. Buena Ventura-Ariza*, 615 F.2d 29 (2d Cir. 1980) or (3) a passenger who disembarked after three quarters of the other passengers.

2. The Miscellaneous Lower Court Characteristics

Frequency analyses were also performed upon a group of five miscellaneous characteristics discussed in the lower court cases but not appearing in either of the two formal profiles nor relied upon by the Supreme Court. These characteristics were identified during the preliminary case review as the miscellaneous characteristics appearing most frequently in the lower court cases. The five miscellaneous characteristics selected from the lower court cases were: the suspect walked at a fast pace in the airport, made trips to the airport restroom, made flight reservations and purchased airline tickets shortly before flight times, and displayed suspicious physical clues, such as unusual bulges under his clothing. The results of the frequency analyses of these characteristics are presented in Figures 3 and 4.

These results suggest that none of these characteristics describe the behavior of drug traffickers and that none are actually important to the police in identifying suspects or in justifying their investigations. Only two of these alleged characteristics, making trips to the airport restroom and walking at a fast pace, were displayed by as many as 15% of the drug couriers. Each of the other three characteristics were displayed by fewer than 8% of these traffickers. Conversely, over 84% of the defendants did not display any of these five miscellaneous characteristics.

Closer examination of the data suggests that, of all possible variations of the relevant behaviors, the alleged profile characteristics are often the *least* descriptive of the actual conduct of drug couriers. For example, agents have

FIGURE 3
*Summary of The Miscellaneous
Lower Court Characteristics*

Characteristic	Number of Defendants Exhibiting Characteristic (and Percentage of all Defendants)		
	Yes	No	Missing
1. Suspect Made One or More Trips to Airport Restroom	16 (15.5%)	29 (28.2%)	58 (56.3%)
2. Suspect with Fast Pace of Walking through Airport	15 (14.6%)	6 (5.8%)	82 (79.6%)
3. Suspicious Physical Clues Observed on Suspect	8 (7.8%)	81 (78.6%)	14 (13.6%)
4. Airline Reservation Made at Last Minute ^a	8 (7.8%)	3 (2.9%)	92 (89.3%)
5. Airline Ticket Purchased at Last Minute ^a	7 (6.8%)	0 (0.0%)	96 (93.2%)

^a For this characteristic "last minute" was defined to include any period of time within the 24 hours preceding the flight.

FIGURE 4
*Breakdown of the Miscellaneous
 Lower Court Characteristics*

Characteristic	Number of Defendants Exhibiting Characteristic	Percentage of All Defendants
1. Suspect Made Trip to Restroom		
Yes—One Trip	14	13.6%
Yes—More Than One Trip	2	1.9%
No—No Trip	29	28.2%
Missing	58	56.3%
2. Suspect with Fast Pace of Walking Through Airport		
Yes—Fast Pace	15	14.6%
No—Slow Pace	2	1.9%
No—Normal Pace	1	1.0%
No—Alternating Speeds (fast and slow)	3	2.9%
Missing	82	79.6%
3. Suspicious Physical Clues Observed on Suspect		
Yes	8	7.8%
No	81	78.6%
Missing	14	13.6%
4. Airline Reservation Made At Last Minute		
Yes—1-24 Hours Pre-flight	8	7.8%
No—More Than 24 Hours Pre-flight	1	1.0%
No—No Reservation	2	1.9%
Missing	92	89.3%
5. Airline Ticket Purchased At Last Minute		
Yes—Less Than One Hour Pre-flight	5	4.9%
Yes—1-24 Hours Pre-flight	0	0.0%
Yes—Same Day As Flight	2	1.9%
No—More Than 24 Hours Pre-flight	0	0.0%
Missing	96	93.2%

testified in a number of cases that trips to the airport restroom by a traveler was a behavior consistent with the profile. Discussion of the possible innocent explanations for such conduct surely is unnecessary. The results of the frequency analysis indicate that in reality this characteristic does not accurately describe the behavior of drug traffickers. While 16 (15.5%) drug traffickers made one or more trips to the restroom, nearly twice as many, 29 (28.2%), did not. This characteristic was not discussed for 56.3% of the defendants.¹⁸²

The data for another characteristic highlight the possible improper manipulation of the profile by law enforcers. Although agents occasionally have testified that the suspect's pace of walking was a profile characteristic, this testimony has been inconsistent. Some agents have testified that walking quickly fit the profile,¹⁸³ while others have claimed that walking slowly did.¹⁸⁴ The results of the frequency analysis demonstrate the suspect's pace was not mentioned for almost 80% of the defendants and, when this characteristic was relied on, all possible variations were exhibited by drug couriers. Suspects who walked quickly comprised the largest group, 15 (14.6%), but people walking at normal, 1 (1.0%), slow, 2 (1.9%) and alternating speeds, 3 (2.9%) were also stopped. These figures suggest that the police relied upon all possible variations of this alleged characteristic and therefore pace of walking has little probative value in describing the behavior of drug traffickers.

The data indicate that all five of the miscellaneous lower court characteristics are of doubtful validity and should not be included in any definition of the drug courier profile. They do not accurately describe the behavior of drug couriers and the police generally do not rely on them.

3. The *Elmore* and *Ballard* Characteristics

The *Elmore* and *Ballard* profiles each contain eleven characteristics.¹⁸⁵ Seven of those characteristics are shared by both profiles and an eighth is shared in part. Each profile also contains separate characteristics not appearing in the other. It was hypothesized that the characteristics shared by the two profiles would appear most frequently. The results indicate that this is true for some but not all of the shared characteristics. The results of the

¹⁸² Fewer than 8% of the defendants displayed suspicious physical clues (such as bulges under clothing), or made airline reservations or ticket purchases at the last minute.

¹⁸³ See, e.g., *United States v. Jefferson*, 650 F.2d 854, 855 (6th Cir. 1981); *United States v. Williams*, 647 F.2d 588, 589 (5th Cir. 1981); *United States v. Garcia*, 450 F. Supp. 1020, 1022 (E.D.N.Y. 1978); *United States v. Rogers*, 436 F. Supp. 1, 2 (E.D. Mich. 1976); *State v. Casey*, 59 N.C. App. 99, 107, 296 S.E.2d 473, 479 (1982).

¹⁸⁴ *Mendenhall*, 446 U.S. at 564 (Powell, J., concurring) (*Mendenhall* walked "very, very slowly"); see, e.g., *United States v. Bowles*, 625 F.2d 526, 528 (5th Cir. 1980); *United States v. Robinson*, 625 F.2d 1211, 1213 (5th Cir. 1980).

¹⁸⁵ See *supra* notes 120 & 124 and accompanying text.

frequency analyses of the characteristics contained in the two formal profiles are presented in Figure 5.

Five of the eight characteristics shared entirely or in part by the *Elmore* and *Ballard* profiles were exhibited by 40% or more of the defendants. They are: travel from a source city (attributed to all but one of the defendants), traveling with little or no luggage (51.5%), nervousness exhibited by the suspect before investigative contact by the police (50.5%), nervousness after contact (41.7%), purchasing airline tickets with cash (47.6%), and traveling under an alias (39.8%). The other shared characteristics were displayed by substantially fewer defendants. Fewer than 20% of the drug traffickers made telephone calls and 10% or fewer left false telephone numbers with the airline or carried large amounts of cash.

The characteristics contained in only one profile generally appear to be less descriptive of drug traffickers' behavior and usually are not relied upon by the police. Only one, carrying numerous bags or little or no luggage (*Elmore*), which is shared in part by the *Ballard* profile, was displayed by all defendants. Only two of the remaining separate characteristics, using public ground transportation (*Elmore*) and purchasing a one-way ticket (*Ballard*), were displayed by as many as 25% of the drug couriers, and in both cases relatively large numbers of suspects acted in ways contradicting the characteristic.¹⁸⁶

These results suggest that five of the characteristics shared (entirely or in part) by the *Elmore* and *Ballard* profiles were relied upon frequently by the police in drug courier profile investigations and in their court testimony in support of searches and seizures. These characteristics arguably provide the most accurate functional definition of the drug courier profile as it has been applied in the field and tested in the courts. Unfortunately, most of these same *Elmore* and *Ballard* characteristics are of questionable validity at identifying drug couriers. For example, the two which appear most often, travel from a source city (shared) and carrying numerous, few or no bags (*Elmore*), are defined so broadly that they encompass all possible conduct and provide no basis for distinguishing drug traffickers from other travelers. Others, such as appearing nervous, permit the officers to make subjective judgments which are impossible for a court to review. The implications for the data for the *Elmore* and *Ballard* profile characteristics are examined more closely in the following sections of the article.

a. The "Shared" Characteristics.

Virtually all discussions of the drug courier profile mention that air travel from a city believed by police to be a distribution center, or "source city" of

¹⁸⁶ All of the remaining "separate" characteristics were displayed by fewer than 20% of these drug couriers. One, excessively frequent travel to source cities, was not attributed to any defendants, and another, travel by circuitous routes, to only one.

FIGURE 5
*Summary of the Formal Elmore
 And Ballard Profile Characteristics*

The Characteristics Shared by Both Profiles			
Characteristic	Yes	No	Missing
1. Suspect Traveled from a Source City of Drugs ^a	102 (99%)	0 (0.0%)	1 (1.0%)
2. Suspect Appeared Nervous ^b			
Before Contact by Officers	52 (50.5%)	12 (11.6%)	39 (37.9%)
After Contact by Officers	43 (41.7%)	1 (1.0%)	59 (57.3%)
3. Suspect Purchased Airline Ticket with Cash	49 (47.6%)	2 (1.9%)	52 (50.5%)
4. Suspect Used Alias	41 (39.8%)	22 (21.4%)	40 (38.8%)
5. Suspect Made One or More Telephone Calls at the Airport	20 (19.4%)	28 (27.2%)	55 (53.4%)
6. Suspect Left False Telephone Callback Number with Airline	11 (10.7%)	7 (6.8%)	85 (82.5%)
7. Suspect Carried Large Amount of Cash	9 (8.7%)	0 (0.0%)	94 (91.3%)
8. Suspect Carried Little or No Luggage ^c	53 (51.5%)	50 (48.5%)	0 (0.0%)
<i>Separate Elmore Profile Characteristics</i>			
1. Suspect Carried Little or No Luggage or Large Quantities of Suitcases ^d	103 (100%)	0 (0.0%)	0 (0.0%)
2. Excessively Frequent Travel to Source Cities by Suspect	0 (0.0%)	0 (0.0%)	103 (100%)
3. Suspect Used Public Ground Transportation (e.g., Taxicabs) at Airport ^e	26 (25.2%)	15 (14.6%)	62 (60.2%)
4. Suspect Traveled by an Unusual Itinerary, Such As Fast Turn Around Time for a Very Lengthy Trip	18 (17.5%)	5 (4.8%)	80 (77.7%)
<i>Separate Ballard Profile Characteristics</i>			
1. Suspect Purchased A One-Way Ticket	26 (25.2%)	12 (11.7%)	65 (63.1%)

2. Suspect Travelled by an Unusual Itinerary, Such as Circuitous Routes	1 (1.0%)	8 (7.8%)	94 (91.3%)
3. Suspect a Known Drug Courier or Trafficker	9 (8.7%)	78 (75.7%)	16 (15.5%)

^a All locations of origin for the suspect's flight were coded as "source cities" because the term is not defined in the case law.

^b This characteristic was divided into two categories to permit analysis of the timing of the appearance of nervousness.

^c This characteristic fulfills part of the *Elmore* profile's definition of the baggage characteristic.

^d The coding criteria adopted for this characteristic encompassed all possible variations of this behavior, including carrying no baggage, or carry-on bags or suitcases or both. These criteria were adopted because of the absence of definitional standards in the case law.

^e Liberal coding criteria were adopted for this characteristic, so that the use of any form of public transportation, including rental cars for arrivals or departures at airports, satisfied the criteria.

^f The liberal coding criteria adopted for this characteristic were satisfied by any trip of 24 hours or less, and cases where a period exceeding 24 hours was described as "fast."

narcotics, is a profile characteristic.¹⁸⁷ Although not part of the *Elmore* or *Ballard* profiles, many cases also discuss travel to a narcotics "use" city as another characteristic. Although travel to "use cities" is not part of either profile, because of its obvious relationship to the source city characteristic it was also subjected to empirical analysis.

Unfortunately, no comprehensive definition of either source or use cities is available for analysis. Government descriptions of "source" and "use" cities have been facially inconsistent. For example, in one case New York City is described as a narcotics source city for the midwest,¹⁸⁸ while in another case Chicago is labeled a distribution center for New York City.¹⁸⁹

As a result, some judges have expressed concern that the DEA might classify every town and city in the United States as a source or use location for purposes of profile analysis.¹⁹⁰ Whether this reflects the reality of drug

¹⁸⁷ For example, "most drugs enter Detroit from one of four 'source' cities (Los Angeles, San Diego, Miami, or New York) . . ." *Mendenhall*, 446 U.S. at 562 (Powell, J., concurring); see also *id.* at 547 n.1 (Los Angeles is the source city for much of the heroin brought into Detroit).

¹⁸⁸ *United States v. Nembhard*, 676 F.2d 193, 196 (6th Cir. 1982), *cert. denied*, 104 S. Ct. 90 (1983).

¹⁸⁹ *United States v. Vasquez*, 612 F.2d 1338, 1342 (2d Cir. 1979), *cert. denied*, 447 U.S. 907 (1980).

¹⁹⁰ See *United States v. Pulvano*, 629 F.2d 1151, 1155 n.1 (5th Cir. 1980); *United States v. Andrews*, 600 F.2d 563, 566-67 (6th Cir.), *cert. denied*, 444 U.S. 878 (1979). Agents have not limited their definitions of suspect locations to the largest urban

usage in the nation or simply overzealous claims by the police, the government's failure to define these characteristics or to substantiate their validity suggests that these characteristics should be given little weight by the courts.¹⁹¹ This is appropriate in the absence of evidence supporting the source and use city characteristics, for if every area of the nation is suspect, then every air traveler is potentially a suspect merely by virtue of traveling between two locations. Such a result is patently absurd and constitutionally unacceptable.

Frequency analyses were performed to determine whether any patterns appear in the application of the source and use city characteristics. Because the government has not defined the source and use city characteristics, all cities of origin of the suspects travel were coded as source cities and all destinations as use cities. This permitted quantitative analysis without requiring the researchers to judge whether individual cities should be treated as a source or use location. It also skewed the data in favor of the drug courier profile, for almost every defendant therefore traveled between source and use locations. Nonetheless, Figure 6 demonstrates that more than 80% of the defendants originated their flights in Florida and California. This suggests that the police treated those two areas as narcotics distribution centers.¹⁹²

These results suggest another important conclusion. When the fact that 64 (62.1%) of the defendants originated their flights from somewhere in Florida, is coupled with the fact that 55 (53.4%) of them were arrested for carrying cocaine, a substance likely to enter the country through Florida from Central

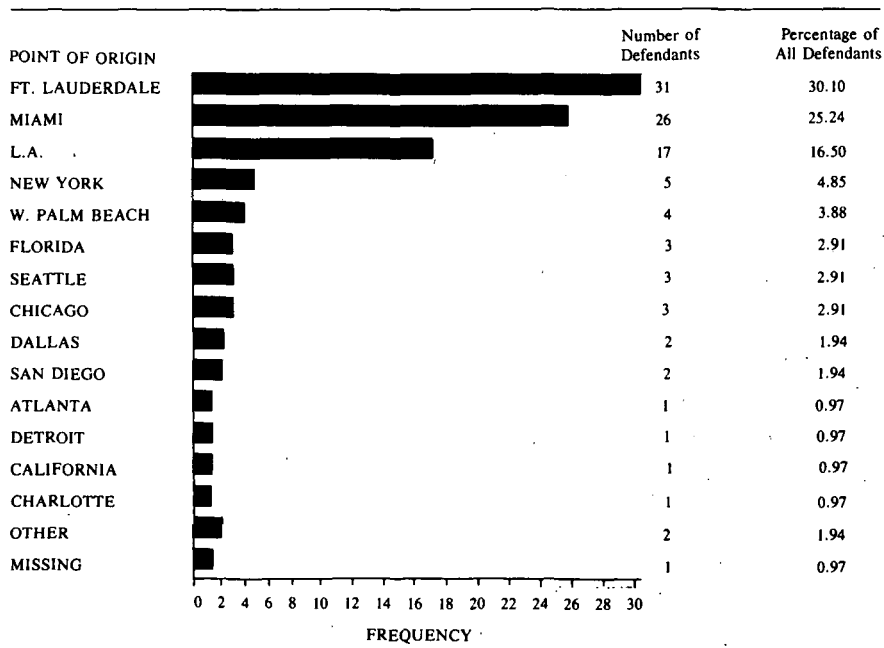
centers. For example, both Birmingham, Alabama, *Elmore*, 595 F.2d at 1037, and Anchorage, Alaska, *Brooker v. State*, 164 Ga. App. 775, 298 S.E.2d 48 (1982), have been described by agents as significant use cities.

¹⁹¹ See, e.g., *Reid*, 448 U.S. at 441 (arrival from Ft. Lauderdale describes "a very large category of presumably innocent travelers"); *Mendenhall*, 446 U.S. at 572 (White J., dissenting); *United States v. Pulvano*, 629 F.2d 1151, 1155 n.1 (5th Cir. 1980) (source city characteristic not given "much weight" because the court is convinced by a review of the cases, and by the direct testimony of a DEA agent "of the tragic fact that every major population center in this country has become a home for drug traffickers"); *United States v. Buena Ventura-Ariza*, 615 F.2d 29, 36 (2d Cir. 1980) (arrival from Miami plus nervousness insufficient to amount to reasonable suspicion); *United States v. Andrews*, 600 F.2d 563, 566-567 (6th Cir.) (travel from Los Angeles, which may indeed be a major narcotics distribution center, cannot be regarded as in any way suspicious because "the probability that any given airplane passenger from that city is a drug courier is infinitesimally small"), *cert. denied*, 444 U.S. 878 (1979); *United States v. Scott*, 545 F.2d 38, 40 n.2 (8th Cir. 1976) (traveling from Los Angeles, a major source of heroin, has "little or no probative value"), *cert. denied*, 429 U.S. 1066 (1977); *State v. Casey*, 59 N.C. App. 99, 108 n.3, 296 S.E.2d 473, 479 n.3 (1982). *But cf.* *United States v. Post*, 607 F.2d 847, 850 (9th Cir. 1979).

¹⁹² This is not surprising although the fact that one-fifth of the suspects flew from other areas suggests that the idea of source cities may indeed be given too much latitude.

or South America, it appears that a primary focus of the airport profile investigations has been to stem the flow of cocaine entering the country through Florida.¹⁹³

FIGURE 6
Point of Origin of the Suspect's Flight



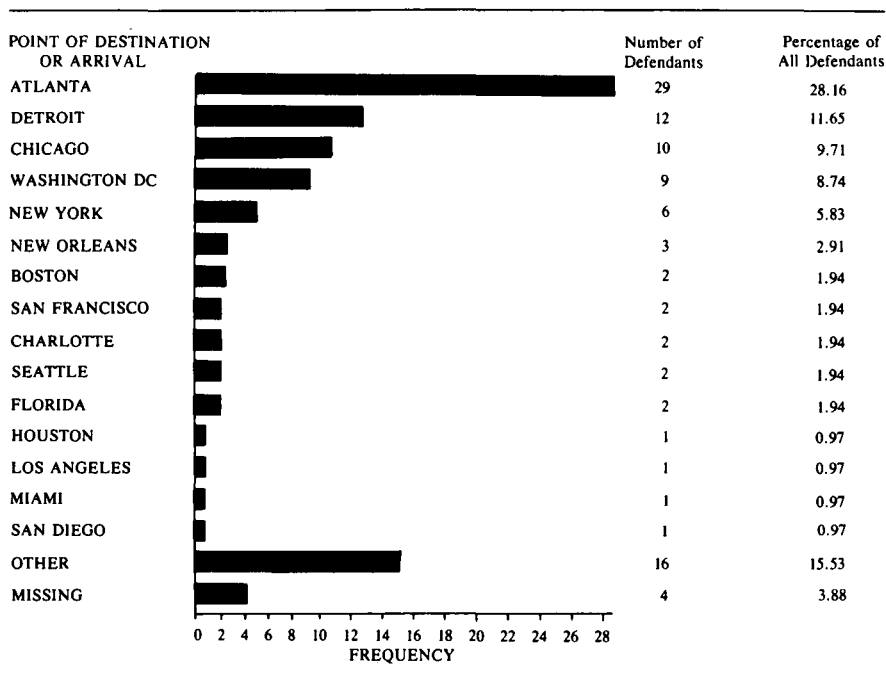
A frequency analysis of the cities of arrival or destination (for those defendants arrested before their flights were completed) also was performed. The results, which are presented in Figure 7, suggest two noteworthy conclusions. First, the impact of Special Agent Markonni, the profile's originator, is apparent. Atlanta was the city of arrival or destination for 29 (28.2%) of the defendants as was Detroit for 12 (11.7%). These are the highest totals for any cities and, not coincidentally, these are the cities where Agent Markonni has worked and trained other agents since developing the drug courier profile.¹⁹⁴

The second conclusion is that the use cities, that is the cities of destination or arrival of drug couriers, are in fact dispersed throughout the country. After Atlanta and Detroit (and Chicago and Washington, D.C. to a lesser

¹⁹³ Twenty defendants were arrested for carrying heroin, five for marijuana, seven for more than one drug, one carried money and more than one drug, eleven were carrying some other controlled substance, such as prescription pills, and the court opinions did not list what three defendants were carrying. One case involved a civil forfeiture action for money.

¹⁹⁴ Private conversation with Special Agent Paul Markonni (April 10, 1984).

FIGURE 7
Suspect's City of Arrival or Destination



degree), individual cities' frequencies fall off rapidly. These results indicate that drug traffickers may travel to any city in the nation. Suspicion surely cannot attach to a traveler simply because he is going somewhere. The data suggest that the use city concept should be given no weight, at least in the absence of a specific definition substantiated by objective data.

The only other shared profile characteristic attributed by the police to as many as one-half of the defendants was "nervousness." Although nervousness by air travelers is undoubtedly common and may be "entirely consistent with innocent behavior,"¹⁹⁵ the government has repeatedly argued that it is an indication of criminality. Agents frequently testify that they are able to distinguish innocent from guilty nervousness, and frequently the courts accept this claim, sometimes deciding dispositive constitutional issues on these grounds.¹⁹⁶

¹⁹⁵ *United States v. Andrews*, 600 F.2d 563, 566 (6th Cir.), *cert. denied*, 444 U.S. 878 (1979); *see also Royer*, 460 U.S. at 507 (plurality opinion).

¹⁹⁶ For example, in *United States v. Sanford*, the court wrote: "He appeared extremely nervous and concerned, and his hands were shaking. He exhibited behavior similar to that seen by Markonni in excess of a hundred times when observing persons in similar situations where narcotics have been involved." 658 F.2d 342, 345 (5th Cir. 1981), *cert. denied*, 455 U.S. 991 (1982). The court simply accepted Agent Markonni's assertion that he could distinguish innocent from criminal nervousness.

The *Sanford* court also exhibited the type of confusion common to courts grappling with the characteristics comprising the drug courier profile. The court held that the

The empirical analysis of this characteristic was designed to accommodate the three-tier model of police-citizen encounters currently applied by the Supreme Court.¹⁹⁷ This model makes critical the point in time when a fact, such as a suspect's nervousness, is learned by the police. This is true because police conduct infringing upon fourth amendment rights must have antecedent justification. For example, facts learned after a brief *Terry* stop cannot be used to justify the preceding stop, but perhaps may be used to establish probable cause for a subsequent arrest. To provide more detailed information about the timing of the police observation of nervousness, and to accurately reflect the treatment of this characteristic in the caselaw, nervousness was coded as two separate characteristics. These were defined simply as whether the suspect appeared nervous before the encounter with officers and whether he acted nervous after the initial encounter. The results of the frequency analyses of these characteristics are presented in Figures 8 and 9.

According to the police 52 (50.5%) of the defendants exhibited pre-contact nervousness. Although nearly one-half of the defendants did not conform to it, the data suggest that it is one of the most significant characteristics to the police. Unfortunately, it is also the most subjective of the characteristics comprising the formal profiles. A reviewing court cannot readily determine if there was a basis in fact for the officer's assertion that the traveler acted in an unusually nervous manner. It is impossible for a court to determine, after the fact, whether or not a suspect's nervousness was any different from that exhibited by countless travelers, or if it even existed. Permitting agents to rely on the nervousness of suspects maximizes police discretion in the field, and minimizes the effectiveness of judicial review.¹⁹⁸

agents had reasonable suspicion to seize the defendant, *id.* at 346, even though it recognized that the controlling precedent in the circuit is that the drug courier profile, without more, is insufficient to justify a seizure, *Elmore*, 595 F.2d at 1039. The court reached its decision by erring in its analysis of the role of "nervousness" in the drug courier profile. While purporting to follow *Elmore*, the court found the agents had possessed reasonable suspicion because "Markonni and Burkhalter did not approach Sanford solely because he exhibited a few of the profile characteristics. His exhibition of most of the characteristics coupled with Sanford's unusually nervous behavior was the basis for their suspicion." *Sanford*, 658 F.2d at 346 (emphasis added).

The court's confusion is remarkable. Not only is the suspect's nervousness one of the primary characteristics of the *Elmore* profile, but the court had listed nervousness as a profile characteristic on the preceding page of the opinion. Thus on successive pages the court defined nervousness as both an *Elmore* profile characteristic and as a nonprofile behavior and made a critical fourth amendment ruling based upon the latter incorrect interpretation.

¹⁹⁷ See *supra* notes 14 & 33 and accompanying text.

¹⁹⁸ This problem was noted earlier concerning the miscellaneous Supreme Court characteristic of "looking around." See *supra* note 177 and accompanying text. It is possible that this miscellaneous characteristic could be interpreted by the police as a form of nervous behavior. The absence of detailed definitions of the profile characteristics made it impossible to verify this. See also *supra* note 141.

FIGURE 8
Suspect Nervous Before Contact

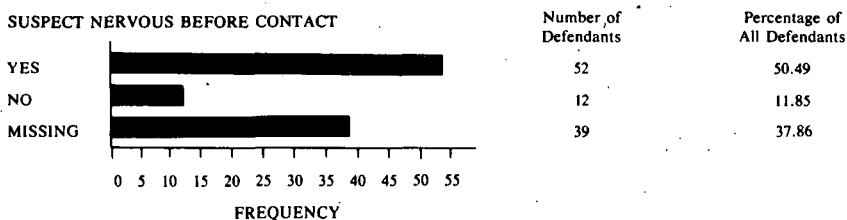
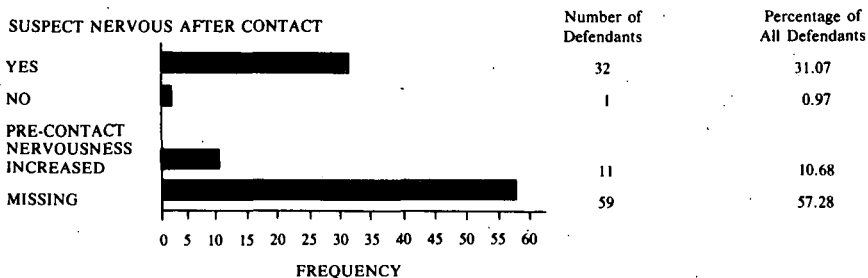


FIGURE 9
Suspect Nervous After Contact



An intriguing result is that fewer suspects were reported as exhibiting nervousness *after* the initial contact by the police. It seems likely that if nervousness (caused undoubtedly by a fear of detection) actually characterizes the population of drug traffickers this phenomenon would be increased by an investigative contact by narcotics officers. Indeed, it is easy to imagine that any air traveler, guilty or innocent, might exhibit nervousness after being contacted by an officer, advised that the agent is investigating drug trafficking and then asked questions indicating that the traveler is a possible criminal suspect. Nonetheless, only 11 (10.7%) of the suspects exhibited an increase of their pre-contact nervousness and only 32 others (31%) were described as being nervous after the contact.

The next most frequently occurring shared profile characteristics is purchasing a ticket with cash, which 49 (47.6%) of the defendants did. Only 2 (1.9%) paid with a credit card and none paid with a check or a pre-paid ticket. This indicates that the police rely upon this characteristic in attempting to identify drug traffickers, and that a relatively large number of arrested traffickers exhibit this behavior.

This characteristic is based on the premise that innocent travelers rarely purchase airline tickets with cash, while drug traffickers pay with cash to avoid leaving records through which they can be traced. Although the data

lends some support to the latter premise, the cases contain no objective evidence supplied by the government or the airlines substantiating either assumption. Significantly, slightly more than one-half of the defendants were not described as paying with cash.

Only one other shared characteristic, use of an alias, was displayed by more than one-third of the suspects and, like nervousness, it demonstrates the importance of determining the stage of the police-citizen transaction during which the police learned the information relied on to establish reasonable suspicion or probable cause. The fact that a traveler used an alias may be suspicious and might well trigger a police investigation and perhaps even contact with the suspect. It is therefore noteworthy that in almost all cases in which the defendant used an alias, this fact was not discovered until *after* the police had contacted the suspect. (See Figure 10.)

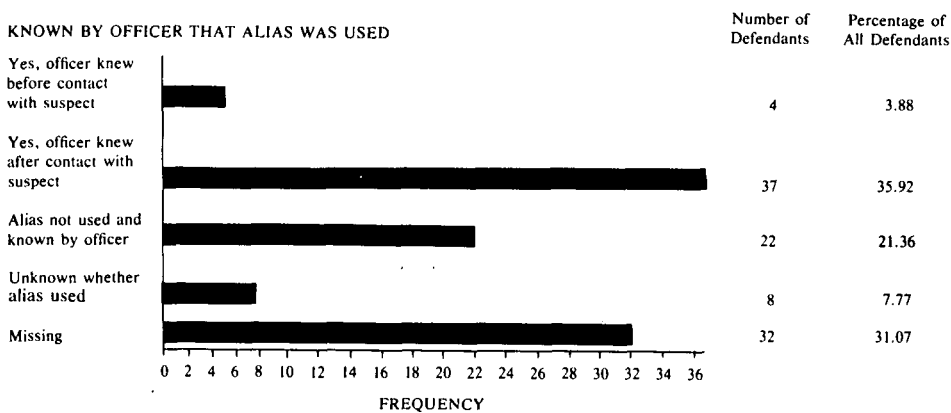
Although 41 (40.0%) of the defendants used aliases, the police learned this fact before making investigative contact for only 4 (3.9%) of them. Obviously, the agents rarely rely on the use of an alias for initial identification of suspects. Instead, this fact is almost always developed after a traveler has been contacted and questioned. As a result, in most cases where the defendant used an alias, the courts must determine whether or not the traveler had already been seized before deciding if this information can be used to justify the police conduct.¹⁹⁹

¹⁹⁹ The current three-tier analysis of police citizen encounters creates bootstrapping problems in this area. If the court concludes that the initial contact with a suspect was consensual, information learned as a result of that contact can be used to justify a subsequent seizure even if the police lacked facts sufficient to justify a seizure at the outset of the encounter. The lines between consensual encounters, *Terry* stops and arrests can be extremely difficult to draw, for the three tiers can shade imperceptibly into each other. *See* *United States v. Waksal*, 709 F.2d 653, 658 (11th Cir. 1983); *United States v. Jensen*, 689 F.2d 1361, 1363-64 (11th Cir. 1982); *United States v. Black*, 675 F.2d 129, 138-39 (7th Cir. 1982) (Swygert, J., dissenting), *cert. denied*, 460 U.S. 1068 (1983).

Many Justices and judges have argued that once an officer contacts a traveler in an airport, identifies himself, explains that he is conducting an investigation of drug trafficking, and asks questions, including a request to see the suspect's ticket and identification, the traveler has been seized. *See, e.g., Royer*, 460 U.S. at 511 (Brennan, J., concurring); *Mendenhall*, 446 U.S. at 569-70 (White, J., dissenting); *United States v. Elsoffer*, 671 F.2d 1294, 1297 (11th Cir. 1982); *United States v. Berry*, 670 F.2d 583, 608 n.4 (5th Cir. 1982) (Clark, J., dissenting).

On the other hand, many judges have adopted Justice Stewart's more restrictive objective test of seizures in airport drug cases, which places the early stages of many airport encounters beyond the protection of the fourth amendment. *Mendenhall*, 446 U.S. at 554-55 (1980) (opinion of Stewart, J.); *see also, Royer*, 460 U.S. at 497 (plurality opinion); *Reid*, 448 U.S. at 442 (Rehnquist, J., dissenting); *United States v. \$73,277, United States Currency*, 710 F.2d 283, 288 (7th Cir. 1983) (expressing belief that six of the current Supreme Court Justices have adopted the Stewart test); *United*

FIGURE 10
Suspect Used Alias



These results raise another question about the impact of profile characteristics on police investigations. Officers learned that 22 (21.4%) of the suspects were not using aliases, yet they continued their investigations. One wonders what impact the discovery of facts contradicting the profile should have on the police, and upon subsequent judicial review. If the profile has predictive validity, the discovery of facts inconsistent with a profile characteristic should militate against the existence of reasonable suspicion or probable cause and instead suggest innocence on the part of the traveler. The government has consistently resisted such arguments, and the courts have not resolved this dilemma.

The importance of this question is emphasized by the results of the frequency analyses for the three remaining shared characteristics, results which suggest that none of these individual characteristics describe the behaviors of drug couriers. For one characteristic, making telephone calls at the airport, more drug couriers did not make phone calls than did. Although numerous reasons, both innocent and criminal, exist for making such calls, this behavior was exhibited by only 20 (19.4%) defendants while a larger number of defendants, 28 (27.2%) traveled through the airports without making any telephone calls. When the latter number is combined with the "missing" total, it appears that as many as 80% of the defendants did not engage in this behavior.

The other two shared characteristics highlight other problems attending the profile. Leaving the airlines a false telephone callback number, like

States v. Moya, 704 F.2d 337, 340-42 (7th Cir. 1983); United States v. Collis, 699 F.2d 832, 834-35 (6th Cir.), cert. denied, 462 U.S. 1119 (1983); Black, 675 F.2d at 134 (citing cases believed to adopt the Stewart test); *supra* note 71 and accompanying text.

purchasing a ticket with cash, may be suspicious because it leaves no record for use in tracing suspects. Yet, it was attributed to only 11 (10.7%) of the defendants. This is surprising because substantial record keeping problems exist which increase the possibility of a false number report and concomitantly reduce the reliability of this characteristic. Any error by the passenger in reciting the number to the airline, or by the airline in receiving, recording or retrieving it, or by the police in dialing it could lead investigators to conclude incorrectly that the traveler had left a false number.

Finally, only 9 (8.7%) of the defendants carried a large amount of cash. This characteristic was not mentioned in the cases of the other 94 (91.3%) defendants. It is noteworthy that the quantity of cash comprising a "large amount" is undefined. Apparently this financial analysis is left to the agents' discretion. Nonetheless, the agents apparently rarely rely upon it.

An eighth characteristic describing the suspects' baggage is shared *in part* by the two profiles. The *Elmore* profile attaches significance to the fact that a traveler is "carrying little or no luggage, or large quantities of empty suitcases."²⁰⁰ The *Ballard* profile, on the other hand, finds suspicion only where a traveler has "no luggage or very limited luggage."²⁰¹ Similar inconsistency in the description of the baggage characteristic appears in the three Supreme Court drug courier profile cases. Mendenhall was traveling without luggage, Reid with a carry-on bag, and Royer with two heavy suitcases. A coding method was developed to accommodate these conflicting definitions, and the results are presented in Figure 11.

When taken in all its eclectic forms, this is the only profile characteristic reported for every defendant. With this in mind, the results are quite interesting. Carry-on bags, the characteristic cited in *Reid*, appear in the cases of 46 (44.7%) defendants. This is consistent with a scenario involving criminals who desire to increase their mobility to facilitate rapid exits from patrolled airports. The viability of this scenario is bolstered by the fact that 7 (6.4%) of the defendants were carrying no luggage, so a total of 53 (51.5%) defendants were traveling with little or no luggage. This is consistent with the *Ballard* profile, part of the *Elmore* baggage characteristic, and two of the three Supreme Court cases, suggesting the possibility of a fundamental profile characteristic.

Unfortunately, this conclusion is contradicted by the results for approximately one-half of the defendants, whose conduct was inconsistent with this theory. Suitcases were involved in the cases of 41 (39.8%) defendants and another 9 (8.7%) traveled with both carry-on bags and suitcases. Thus 50 (48.7%) of the defendants were burdened with substantial luggage. It is noteworthy that 47 (45.6%) of the defendants checked suitcases with the airlines, which would delay departure from the airport. These results suggest a contradictory scenario in which drug couriers use suitcases to carry large

²⁰⁰ *Elmore*, 595 F.2d at 1039 n.3.

²⁰¹ *Ballard*, 573 F.2d at 914.

FIGURE 11
Types of Baggage

Type of Baggage Carried	Number of Defendants	Percentage of All Defendants
None	7	6.8
Carry-on Bags	46	44.7
Luggage (suitcases)	41	39.8
Carry-on bags and Luggage	9	8.7
Missing	0	0.0
TOTAL	103	100.0

quantities of drugs and check luggage either to allow abandonment if police surveillance is detected or to permit confederates to claim it.

The data demonstrate that these 103 drug couriers exhibited *every* possible behavior concerning baggage in relatively equivalent numbers. A profile characteristic which defines all possible human behavior as suspect is obviously unacceptable under the fourth amendment, and the validity of this characteristic remains open to question.

b. The Separate *Elmore* and *Ballard* Characteristics

Each profile also contains three characteristics not appearing in the other. Frequency analyses were performed for each of these. The *Elmore* characteristics are discussed first.

The *Elmore* profile describes "excessively frequent travel to source or distribution cities"²⁰² as a "secondary" profile characteristic, yet none of the opinions studied attributed the behavior to any defendant. Somewhat

²⁰² *Elmore*, 595 F.2d at 1039 n.3. The profile does not provide any standards for deciding which are source cities nor for measuring when such travel is excessively frequent. Once again, definition of these criteria is apparently left to the discretion of the investigating officers. Although this raises the same theoretical concerns about effective judicial review discussed earlier, the results suggest that this characteristic has little practical significance. None of the opinions studied mentioned this as a behavior exhibited by the defendant. The unavoidable conclusion is that this characteristic plays little or no role in law enforcement efforts or judicial review in these cases.

better results were found for another "secondary" *Elmore* characteristic, "the almost exclusive use of public transportation, particularly taxicabs, in departing from the airport."²⁰³ Even as liberally coded for the study, however, only 26 (25.2%) defendants exhibited this behavior,²⁰⁴ while 15 (14.2%) defendants arrived or departed in private vehicles, a behavior contradicting the profile.

The final characteristic appearing only in the *Elmore* profile is an "unusual itinerary, such as a rapid turnaround time for a very lengthy airplane trip."²⁰⁵ In spite of the use of coding criteria favoring the presence of this characteristic,²⁰⁶ only 18 (17.5%) defendants were described as traveling with a fast turnaround time. Of this group, 1 (1.0%) waited more than 24 hours before returning, and 10 (9.7%) waited 13-24 hours. Defendants might well argue that a layover exceeding 12 hours is not fast, and can be explained by a number of innocent reasons. These results underscore the need for precise definitions of the profile characteristics.

Finally, the three characteristics appearing only in the *Ballard* profile were examined. The best results were found for purchasing a one-way ticket, and even these were mixed. Although 26 (25.3%) defendants fit the characteristic, 12 (11.6%) purchased round trip tickets and this characteristic was missing for most defendants. In contrast, only one defendant was described as having the secondary characteristic, traveling by an "unusual itinerary, taking circuitous routes from cities known to be source cities for narcotics. . . ."²⁰⁷

The results are little better for the third characteristic, "travel by a known narcotics trafficker."²⁰⁸ The significance of this characteristic is obvious, for no person is more suspicious than a known criminal operating in the venue of his crime. As can be seen in Figure 12, only 9 (8.8%) of the defendants or

²⁰³ *Id.*

²⁰⁴ The coding criteria for this variable again favored the profile. The use of any type of public transportation, not merely taxicabs, by travelers arriving as well as departing was scored as conforming to this profile variable. A narrow interpretation of this variable would have resulted in fewer defendants exhibiting this behavior. Nonetheless it was missing for 62 (60.2%) of the defendants.

²⁰⁵ *Elmore*, 595 F.2d at 1039 n.3.

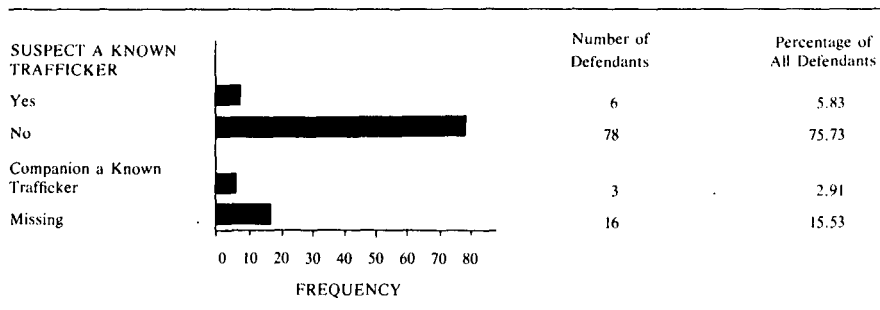
²⁰⁶ *Elmore*, does not define the elements of this characteristic, such as the period of time deemed "rapid" or the distance equaling "very lengthy." To permit quantitative analysis of this characteristic, liberal coding criteria favoring the presence of this characteristic were developed which adopted the *Elmore* definition, a fast turnaround time for a lengthy trip. For coding purposes, any trip, no matter what its length, was treated as "very lengthy." Any trip described as having a fast turnaround time or in which the time between flights was 24 hours or less was deemed to fit the profile. Nonetheless, 5 (4.9%) defendants did not conform to the characteristic and it was missing for another 80 (77.7%).

²⁰⁷ *Ballard*, 573 F.2d at 914.

²⁰⁸ *Id.*

their companions were known as traffickers when the agents first observed them.²⁰⁹ Apparently the other 91% were unknown by the officers prior to the airport investigation. These figures indicate that this characteristic played a minimal role in these investigations.

FIGURE 12
Suspect a Known Courier



On the other hand, these data emphasize the significance of the profile methodology in these airport investigations. The fact that more than 90% of the defendants were unknown to the officers before the investigations commenced reflects the reality that agents stationed in airports observe thousands of strangers passing quickly by every week, and rely on something other than direct knowledge of criminality to justify their investigations.

C. *The Search for a Definition of the Profile: The Characteristics as They Appear in Combination*

Drug courier profile proponents have objected to an item-by-item analysis of individual profile characteristics, arguing that this misapprehends the profile methodology. They contend that it is only when the characteristics are interpreted in combination by a trained agent that they take on significance.²¹⁰ Empirical analyses were performed to determine whether the officers utilizing the profile were in fact specialists and whether the appearance of the *Elmore* and *Ballard* profile characteristics in combination provide a more accurate definition of the profile as it has been applied in the field. The empirical results suggested answers to both questions.

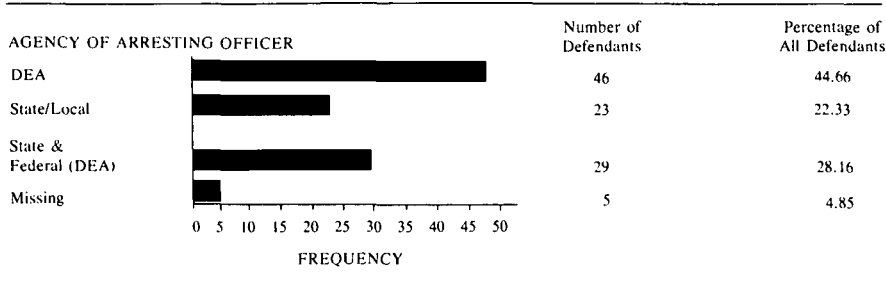
Although it was impossible to determine the training, experience, and abilities of the individual officers involved in all of the cases, it was possible

²⁰⁹ This number includes a defendant whose status as a "known trafficker" was based on a drug arrest 12 years earlier. See *United States v. McCranie*, 703 F.2d 1213, 1219 n.3 (10th Cir. 1983).

²¹⁰ See *Royer*, 460 U.S. at 525 n.6 (Rehnquist, J., dissenting); *Mendenhall*, 446 U.S. at 564-66 (Powell, J., concurring).

to determine the law enforcement agencies for which they worked. It was hypothesized that agents working for the DEA were more likely to be trained specialists in drug law enforcement in general and in the use of the drug courier profile in particular. Operating from this assumption, the results presented in Figure 13 support the claim that the profile generally is used by trained narcotics officers.

FIGURE 13
Agency of Arresting Officers



DEA agents were involved in the arrests of 72.9% of the defendants.²¹¹ This suggests that in most cases the drug courier profile has been applied by agents trained in drug law enforcement. The increasing use of state and local police in these investigations may alter this conclusion in future cases.²¹²

Next an attempt was made to determine whether the appearance of the *Elmore* and *Ballard* profile characteristics in combination in the cases would indicate whether one group of behaviors is relied upon by the police more frequently than the others. To study this question cross-tabulations were performed to calculate the number of characteristics displayed by each defendant.²¹³ The results are presented in Figure 14. They suggest that the *Elmore* profile is the most important.

²¹¹ Agents of federal law enforcement agencies other than the DEA did not appear in investigative or arresting capacities in any of the cases studied.

²¹² One of the goals of the eight point program to combat drug trafficking announced by President Reagan in October, 1982, is to provide specialized training for state and local law enforcement officials and to increase their participation in drug law enforcement. Drug Abuse Policy Office, Office of Policy Development, The White House, 1984 National Strategy for Prevention of Drug Abuse and Drug Trafficking 48 (1984). The practical effect of this policy is demonstrated by the Atlanta experience. In fiscal year 1984, the DEA detail at the Atlanta airport consisted of four agents. Since October, 1984, eight officers from the Georgia Bureau of Investigation and local county police forces have been added to the detail. The number of arrests has increased along with the increase in the number of officers. The Atlanta Constitution, May 10, 1985, at 1A, col. 1.

²¹³ The characteristics contained in the two profiles are presented in Figure 5 and discussed *supra* notes 120 & 124 and accompanying text. For purposes of the present

Although the liberal coding criteria utilized favor the presence of profile characteristics,²¹⁴ not one defendant displayed all characteristics contained in any of the three formulas studied. Indeed, fewer than 7% of these drug couriers displayed more than one-half of the *Elmore* or *Ballard* characteristics. No defendant displayed nine or more characteristics. The police obviously did not require a traveler to exhibit even a majority of drug courier profile characteristics before considering him a suspect. Nonetheless, it appears that these defendants as a group displayed the *Elmore* characteristics in greater numbers than those characteristics contained in the *Ballard* or shared formulas.

Analysis of Figure 14 reveals surprising similarities in the results for the shared and the *Ballard* characteristics.²¹⁵ The results suggest that the *Elmore* profile, on the other hand, was more accurate than either the *Ballard* or shared formulas at describing the behavior of drug couriers. These arrested drug couriers simply exhibited larger numbers of the *Elmore* characteristics²¹⁶ than those contained in the *Ballard* or shared formulas. Although this suggests that the *Elmore* profile is more accurate at describing drug couriers than the other drug courier profiles, questions about its effectiveness remain.

Any conclusions reached about the efficacy of any of these profiles depend

analysis, nervousness by the suspect before and after the initial encounter with the police were coded as two separate characteristics. This favored the profile by increasing the number of possible characteristics available for every suspect.

²¹⁴ Within the *Elmore* profile, suspects conformed to the baggage characteristic for coding purposes if they carried little or no luggage, carry-on bags or suitcases. In short, any possible variation satisfied this variable. Likewise, a suspect who used any form of public transportation, including rental cars, for arriving or departing from the airport, was coded affirmatively. This is more generous than the profile definition focusing on the use of taxicabs to depart from the airport.

²¹⁵ For the shared characteristics, 16 defendants (15.5%) displayed only one or two characteristics, 58 (56.3%) exhibited three or four characteristics, 27 defendants (26.2%) conformed to five or six, and only 2 defendants (1.9%) satisfied seven. Although the *Ballard* profile as coded contained a larger number of characteristics than the shared category (12 versus 9), the defendants did not display a corresponding increase in the number of *Ballard* characteristics they exhibited. Once again, no suspect exhibited all possible characteristics, but the same number of defendants exhibited one and five characteristics and similar numbers conformed to one or two characteristics (15), three or four (50) and five or six characteristics (32), although in the higher distributions the *Ballard* profile achieved better results. For example, 6 defendants displayed seven or eight *Ballard* characteristics compared to 2 defendants for the shared characteristics. These results indicate that the separate *Ballard* characteristics have little impact in the actual use of the profile, an analysis generally consistent with the data presented in Figure 5.

²¹⁶ For example, in the lower end of the distribution only 7 defendants (6.8%) displayed just one or two *Elmore* characteristics and only 43 defendants (41.7%) conformed to just three or four. Conversely, 46 defendants (44.6%) displayed five or six characteristics and 6 (5.8%) fit seven characteristics, although just 1 defendant displayed eight.

FIGURE 14
*The Number of Defendants Exhibiting One or
 More of the Elmore, Ballard and "Shared"
 Characteristics*

Number of Characteristics Exhibited by Each Defendant	Number of Defendants Exhibiting One or More Profile Characteristics		
	Number of Defendants Exhibiting "Shared" Characteristics	Number of Defendants Exhibiting <i>Ballard</i> Profile Characteristics	Number of Defendants Exhibiting <i>Elmore</i> Profile Characteristics
1	7 (6.8%)	7 (6.8%)	1 (1.0%)
2	9 (8.7%)	8 (7.8%)	6 (5.8%)
3	34 (33.0%)	27 (26.1%)	19 (18.4%)
4	24 (23.3%)	23 (22.3%)	24 (23.3%)
5	19 (18.4%)	19 (18.4%)	27 (26.2%)
6	8 (7.8%)	13 (12.6%)	19 (18.4%)
7	2 (1.9%)	4 (3.9%)	6 (5.8%)
8	-----	2 (1.9%)	1 (1.0%)
9	-----	-----	-----
10	-----	-----	-----
11	-----	-----	-----
12	-----	-----	-----
TOTAL	103 (100%)	103 (100%)	103 (100%)

upon the standards adopted for measuring their success. For example, if the courts were to require that at least six characteristics (the number of characteristics discussed favorably by a majority of the Supreme Court Justices in *Royer*) are necessary to establish reasonable suspicion, even the *Elmore* profile would have to be judged a failure, for only 26 (25.2%) of the defendants exhibited that many *Elmore* characteristics. On the other hand, if only four characteristics (the number rejected as insufficient by eight Justices in *Reid*) were deemed to establish reasonable suspicion, the *Elmore* profile is more successful, for all but 26 (25.2%) of the defendants displayed at least that number.

A purely numeric standard of success for the profile is, of course, too simplistic. Such an approach assumes all characteristics are equivalent in suggesting criminality. This is inaccurate, since some characteristics, like using an alias, are inherently more suspicious than others which appear to have little or no probative value, such as traveling with carry-on bags. In addition, the profiles may be less accurate than these empirical results indicate because of the pro-profile coding criteria adopted for this study.

In spite of these limitations, the results obtained by the uniform coding criteria and procedures utilized indicate that the *Elmore* characteristics are more accurate than the *Ballard* profile at describing the behavior of drug

couriers, and are relied on collectively more often by the police. These data suggest that the *Elmore* profile provides the best functional definition of the drug courier profile appearing in the caselaw.

D. *The Significance of the Elmore Characteristics Appearing in Combination*

Analyses were also performed to explore the relative importance of the individual profile characteristics as they appeared in combination in the cases. Cross-tabulations were performed to reveal how often each of the individual characteristics appear when one or more profile characteristics are present. It was hypothesized that the more important characteristics, those generally relied upon by police to identify traffickers and to justify their investigations, would be exhibited by drug couriers whether or not those defendants conformed to large or small numbers of profile characteristics. Conversely, less important characteristics would serve a secondary role. Not only would they be displayed by fewer defendants, but they would also appear only when relatively large numbers of other more important characteristics also were present. Because the *Elmore* formula appears to be the most important drug courier profile, the discussion focuses on these results, which are presented in Figure 15.

It appears that the *Elmore* characteristics fall into three groups of varying importance. The first and most important group consists of two characteristics displayed by almost all defendants.²¹⁷ They are traveling from a source city and carrying many, few or no bags. These two characteristics are exhibited by most defendants, and appear throughout the entire range of combinations of characteristics displayed by these drug couriers.²¹⁸

A second group of *Elmore* characteristics includes unusual nervousness before (52 suspects, 50.5%) and after (43 suspects, 41.7%) contact by the police, the purchase of a ticket with cash (49 suspects, 47.6%), and the use of an alias (41 suspects, 39.8%). Although displayed by fewer defendants than the characteristics in the first group, those in the second group were exhibited by a relatively large number of defendants throughout most of the range of distributions. For example, defendants displaying from three to eight characteristics were likely to conform to some or all of the second group of characteristics.

These two groups of characteristics appear to form the core of the *Elmore* profile, for they were exhibited by the largest number of defendants in the

²¹⁷ One problem with these characteristics is they describe countless innocent travelers as well. Another is that the liberal coding criteria necessitated by the government's failure to define the profile characteristics causes the impact of these characteristics to be overestimated.

²¹⁸ These were, for example, the only characteristics displayed by five of the seven defendants displaying only one or two *Elmore* characteristics. Similarly, all 27 of the defendants displaying five characteristics conformed to these two primary characteristics.

FIGURE 15
*Frequency of Appearance of the Elmore Characteristics by the
 Total Number of Characteristics Displayed By Each Defendant*

Total Number of Charac- teristics Displayed by Each Defendant	Number of Defendants Displaying This Total Number of Charac- teristics	Number of Defendants Displaying Each Individual Characteristic											
		Travel From Source City	Large Amounts or Little or No Baggage	Nervous Before Contact By Police	Nervous After Contact By Police	Purchased Ticket With Cash	Alias Used	Public Ground Trans- porta- tion	Tele- phone Call	Fast Turn- Around Time	False Tele- phone Number	Large Amount of Cash	Exces- sive Travel
1	1	0	1	0	0	0	0	0	0	0	0	0	0
2	6	6	4	0	1	0	0	1	0	0	0	0	0
3	19	19	16	6	2	3	6	3	2	0	0	0	0
4	24	24	24	10	9	9	8	4	5	2	1	0	0
5	27	27	27	16	13	17	10	7	6	5	4	3	0
6	19	19	17	14	12	13	12	7	5	9	4	2	0
7	6	6	4	6	5	6	4	4	1	1	2	3	0
8	1	1	1	0	1	1	1	0	1	1	0	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	103	102	94	52	43	49	41	26	20	18	11	9	0

most frequently recurring combinations. They are the characteristics most generally relied upon by the police to identify drug couriers and to justify their investigative conduct in the reviewing courts. It is noteworthy that all of them are included in the group of seven characteristics defined as "primary" in *Elmore*.²¹⁹

The third group consists of the remaining characteristics which were all displayed by fewer defendants. These include carrying a large amount of cash (9 suspects, 8.7%), leaving a false telephone number (18 suspects, 17.5%), making telephone calls at the airport (20 suspects, 19.4%) and using public ground transportation (26 suspects, 25.2%). These characteristics seem merely to supplement the more important characteristics. They not only appear infrequently, but when they do it is generally only in conjunction with a large number of the more common characteristics found in the first two groups. For instance, when only one to four characteristics were present, no defendants were described as carrying large amounts of cash. When five to eight characteristics were present, however, it was attributed to a small number of defendants, perhaps adding cumulative weight to the other allegedly suspicious behaviors of the traveler. Similar results were yielded for the other characteristics in this group.

Two of these characteristics, carrying a large amount of cash and flying with a fast turnaround time, were defined as "primary" in *Elmore*. The data belie this description. The other three were all defined as "secondary" characteristics, a description supported by the empirical results. The final characteristic, excessively frequent travel to source cities, simply appears to have no importance. It was not reported in any of the cases studied and arguably should not be considered a profile characteristic at all.

The data suggest that in practice *Elmore* provides a functional definition of the drug courier profile as it has been applied in the field. It consists of two amorphous primary characteristics often supported by a second group of behaviors, which are in turn occasionally supplemented by a tertiary group of characteristics. The nature of the judicial response to the presence of the *Elmore* characteristics is explored in the final section of the article.

E. *The Impact of the Profile Characteristics on the Existence of Reasonable Suspicion*

After determining that the *Elmore* profile provides the most accurate definition of the characteristics relied on by agents in airport drug investigations, the impact of the presence of these characteristics on judicial decision making was examined. This analysis focused upon the judicial rulings deciding whether the arresting officers possessed reasonable suspicion to justify a *Terry* search or seizure. This issue was selected for analysis because the primary constitutional question implicated by the profile's use is whether it

²¹⁹ See *supra* note 120 and accompanying text.

establishes the predicate facts necessary to justify *Terry* investigative searches and seizures.²²⁰

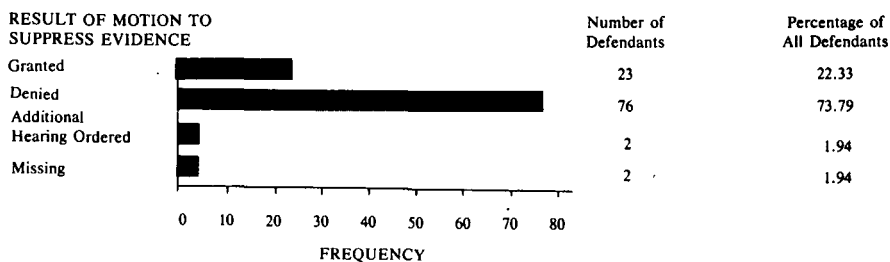
The attempt to determine whether some relationship exists between the presence of drug courier profile characteristics and court rulings on the reasonable suspicion question is complicated by the fact that in a number of cases other factors, such as the presence of a tip, may have influenced the court's decision. Nonetheless, if the presence of profile characteristics in fact influences judicial decisionmaking²²¹ a direct, if not perfectly linear, relationship should be found between the court rulings and the number of drug courier profile characteristics present in each case. As the number of characteristics present in a case increases, so should the likelihood the courts will rule that the police possessed reasonable suspicion justifying a *Terry* seizure. The results presented in Figure 17 indicate that such a relationship in fact exists.

The courts found the existence of reasonable suspicion for 52 (50.5%) defendants, and no reasonable suspicion for 24 (23.4%) others.²²² Analysis of these rulings indicates that the number of *Elmore* characteristics present

²²⁰ See *supra* notes 36-39 and accompanying text.

²²¹ Analysis of judicial rulings on defendants' motions to suppress the evidence seized during these investigations suggests general judicial acceptance of the drug courier profile methodology. The courts denied the suppression motions of 76 (73.8%) defendants, and granted the motions of 23 (22.3%). The results were missing for only 2 (1.9%) defendants. The data indicate that the courts determined that the police conduct, including the use of the drug courier profile, did not violate the defendants' constitutional rights, since such violations would require the suppression of the evidence seized. The importance of the rulings on suppression motions cannot be overestimated in these drug possession cases, because in most cases these rulings will be outcome determinative. Suppression of the evidence because of unconstitutional police conduct often precludes successful prosecution on a charge of possession, while denial of the motion generally leads to a conviction.

FIGURE 16
Rulings on the Motions to Suppress Evidence



²²² The courts did not reach the issue in the cases of 5 (4.9%) defendants, usually because they determined the suspect had not been subjected to a prearrest seizure requiring reasonable suspicion. The issue was missing for 22 (21.4%) defendants.

FIGURE 17
*Court Rulings on the Existence of Reasonable Suspicion
 by the Number of Elmore Characteristics Present*

Number of Characteristics Displayed by Each Defendant ^a	Court Rulings on Defendants' Motions to Suppress				Total Defendants Displaying This Number of Characteristics
	Held Reasonable Suspicion Existed	Held No Reasonable Suspicion	Court Did Not Decide Reasonable Suspicion Issue	Missing	
1	0	1	0	0	1
2	1	1	2	2	6
3	9	4	0	6	19
4	7	11	2	4	24
5	15	4	1	7	27
6	16	1	0	2	19
7	3	2	0	1	6
8	1	0	0	0	1
TOTAL	52	24	5	22	103
Percentage of All Defendants	50.5%	23.4%	4.9%	21.4%	100%

Chi-Square Measure of Significance at 0.03 level

^a No defendants displayed more than 8 of the *Elmore* characteristics, although a maximum of 12 was possible as coded.

in a case is related to the court rulings. As the number of characteristics present in a case increases, so does the general probability that the court will find the existence of reasonable suspicion.²²³ For example, when only one of the *Elmore* characteristics was present the court held there was no reasonable suspicion, but when eight characteristics were present the court found that this standard was satisfied. Similarly the courts found that reasonable suspicion existed in just one of the six cases (17%) where only two *Elmore* characteristics were present. When three characteristics were present, however, the courts held there was reasonable suspicion for over 47% (9 of 19) of the defendants. The percentage increased to 55% (15 of 27) when five characteristics were present, and to more than 80% (16 of 19) when defendants displayed six *Elmore* characteristics. In short, as the number of *El-*

²²³ A chi-square measure of the relationship between these two variables was obtained but it tended to be overestimated, and thus had reduced reliability, because of the small number of responses in proportion to the number of categories of data to be related in this study. Nonetheless, since examination of the results suggested certain patterns in the relationship between the number of characteristics present in a case and the court decision on the reasonable suspicion issue, the chi-square results yielded are presented for reference purposes for the reader, but are not discussed. Again the best results were yielded for the *Elmore* profile, for which the chi-square measure was at the .03 level, well within the commonly used .05 measure of statistical significance.

more characteristics present in a case increased from one to eight, the courts were generally more likely to find that the police possessed reasonable suspicion.

The only deviations from this tendency appeared when four and seven characteristics were displayed by defendants. When four characteristics were present, the courts held the police lacked reasonable suspicion to seize 11 defendants and possessed it for only 7. When seven characteristics were present, the courts found reasonable suspicion for only one-half of the six defendants. No ready explanation for these deviations appears in the data or the caselaw, but they may be explained, in part, by judicial skepticism about some of the characteristics.²²⁴

The data suggest, however, that a generally direct relationship exists between the number of *Elmore* characteristics displayed by a defendant and the court's decision concerning the existence of reasonable suspicion justifying a seizure. The results also indicate that in cases in which the courts hold reasonable suspicion exists, the focal number of characteristics is six. As the number of characteristics exhibited by a defendant increases from one to six, so does the general likelihood that the courts will find the existence of reasonable suspicion. When the number increases to seven characteristics, however, the percentage of rulings finding reasonable suspicion declined. This suggests that the addition of characteristics beyond a total of six may not influence judicial decisions.²²⁵ Conversely, the decisions holding that no reasonable suspicion existed seem to center around the presence of four characteristics in a case. The number of decisions holding no reasonable suspicion falls off rather evenly in cases when either fewer or more than four characteristics are present.²²⁶

Whichever approach is taken it appears that an increase in the number of *Elmore* characteristics from one to six bears a direct relationship to the court ruling on the existence of reasonable suspicion. These data suggest that the courts are, in fact, influenced by the presence or absence of *Elmore* profile characteristics in deciding this important constitutional question.

²²⁴ For example, one-half of the characteristics attributed to all 24 defendants displaying four *Elmore* characteristics were the "source city" and "baggage" characteristics. In these cases the courts simply may have been skeptical about the suspicion attaching to behaviors which are facially innocent.

²²⁵ It is interesting to note that in *Royer*, where the government claimed six profile characteristics were present, eight Supreme Court Justices believed reasonable suspicion existed. See *supra* notes 104 & 108-12 and accompanying text.

²²⁶ Again it is interesting to note that in *Reid* eight Supreme Court Justices believed that the four profile characteristics cited by the government did not amount to reasonable suspicion. See *supra* notes 89-93 and accompanying text.

These results raise a fundamental problem inherent in the drug courier profile's use. For if the courts are attributing constitutional significance to the profile characteristics, they are doing so without first requiring the government to demonstrate that the profile characteristics actually identify criminals. This represents an abdication of judicial review of police conduct which is all the more disturbing in light of the questionable validity of many of the profile characteristics.

III. CONCLUSION

Use of the drug courier profile represents a radical departure from traditional fourth amendment methodology and theory. It permits searches and seizures of travelers whose conduct is facially innocent because they conform to a formula which purports to describe an entire class of criminals. This violates the "central teaching" of fourth amendment jurisprudence that each case must be examined on its own individualized facts. Nonetheless, the courts have regularly permitted the police to rely on the profile characteristics to justify seizures of travelers, although the definition of the profile has varied, chameleon-like, from case to case. The courts' failure to demand a specific definition of the profile is all the more remarkable in light of the dearth of evidence confirming the validity of the profile characteristics.

This article suggests that acceptance of varying definitions of the profile by the courts constitutes an abdication of the judicial duty to review police conduct to ensure that it satisfies the requirements imposed by the fourth amendment. The courts have allowed the government to claim that the various innocent actions of individual defendants conform to a profile describing criminality, yet the empirical results suggest that most of these alleged characteristics do not in fact describe the behaviors of drug couriers and are not relied upon by the police. Indeed, the results reported indicate that a functional definition of the drug courier profile should include only the characteristics contained in the original *Elmore* formula. Even those characteristics attributed to a large percentage of the defendants are of questionable value in resolving issues of constitutional significance. Some, like flying from "source cities," are defined so broadly that they are meaningless. Others, like the travelers' nervousness, permit the officers to make subjective judgments about the suspects' conduct which are essentially unreviewable by the courts.

The most rational judicial response to the profile would be to ignore it and rely instead upon the traditional methodology of the fourth amendment in deciding individual cases. Yet the empirical data indicate that in the face of the profile's shortcomings the courts have permitted the police to rely on the profile characteristics and have themselves been influenced by their presence when deciding fundamental issues of constitutional law. To describe

this as an example of failed judicial review is accurate, and perhaps even charitable. Surely the liberties protected by the fourth amendment merit closer attention from the courts entrusted with that task.

