

12/16/02

U.S. Department of Transportation

FEDERAL AVIATION
ADMINISTRATION
Office of Aviation Policy and Plans, APO
Washington, D.C. 20591

INITIAL REGULATORY EVALUATION,
INITIAL REGULATORY FLEXIBILITY ANALYSIS,
INTERNATIONAL TRADE IMPACT ASSESSMENT,
AND UNFUNDED MANDATES ASSESSMENT

AREA NAVIGATION
NOTICE OF PROPOSED RULEMAKING
(14 CFR Parts 1, 71, 91, 95, 97, 121, 125, 129, 135)

OFFICE OF AVIATION POLICY AND PLANS
OPERATIONS REGULATORY ANALYSIS BRANCH,
APO-310
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October 2002

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EXECUTIVE SUMMARY

This proposed rule would amend 14 CFR Parts 1, 71, 91, 95, 97, 121, 125, 129, 135. The proposed amendments would change the definition of area navigation (RNAV) and related terms so that it would encompass technological advances in navigation such as the Global Positioning System (GPS) and other means as they become available. The proposed amendments would enable supplements to existing ground-based navigation routes and procedures with new routes and procedures that are not wedded to ground-based navigation aids. The proposed amendments would open up these new routes to operators that seek to use them while allowing other operators that want to continue using presently-existing routes and procedures to do so without any mandated change. In addition, the proposed amendments would eliminate the middle marker as a required component of the Instrument Landing Systems (ILS). In some cases, the proposed amendments would add language and sections that would codify current practice.

The following costs savings and costs are expected:

- ❑ Ceasing operations of the middle markers would result in cost savings (to the federal government and other owners of these markers). The proposed amendments would save \$34 million (\$20 million discounted) over 15 years.
- ❑ Removing the middle markers would result in costs to the federal government and other owners of these markers. The analysis assumes that middle markers would be completely decommissioned over two years. These costs would range from \$6.7 million (\$6 million, discounted) to \$20.2 million (\$18.2 million, discounted) depending on whether a low or high estimate of decommissioning costs is used.
- ❑ Operators that choose to use the new routes are expected to save fuel costs as a result of reduced flight distances and times. Although specific estimates of fuel cost savings cannot be estimated at this time, results from test routes in the Northeast, Southeast, and Southwest indicate that substantial cost savings are possible. Some airlines are currently flying FAA approved advanced area navigation test routes. Airlines estimate the cost savings as a result of flying these test routes alone exceed \$30 million a year. These cost savings resulting from the test routes would indicate that substantial savings may be achieved when more advanced RNAV routes are developed.

Other proposed amendments would:

- ❑ Align certain U.S. terms with ICAO terminology as part of an ongoing initiative;
- ❑ Reorganize Part 71 for clarity;
- ❑ Allow new substitutes for the outer marker component of ILS;
- ❑ Make language and terminology consistent among sections;

- Codify current practice.

The FAA has determined that the proposed rule would be cost-beneficial. In addition, the proposed rule would have a neutral impact on international trade and would not have a significant economic impact on a substantial number of small entities. It does not contain any Federal intergovernmental or private sector mandate.

I. Introduction

This regulatory evaluation examines the costs and benefits of a proposed rule to amend 14 CFR parts 1, 71, 91, 95, 97, 121, 125, 129, 135.

The proposed rule aims to accomplish the following:

- Expand the use of area navigation systems (RNAV) by broadening terminology to include non-ground based navigation aids, while retaining the current ground based system;
- Eliminate the middle marker as a required component of the (ILS);
- Allow additional substitutes for the outer marker;
- Reorganize Part 71 for clarity;
- Align certain U.S. terms with ICAO;
- Make language and terminology consistent among sections;
- Codify current practice.

II. Background

The proposed rule would broaden terminology in the regulations to encompass advances in navigation system technology in order to expand the use of RNAV while retaining the current ground-based system. The availability of GPS for use in civil aviation in recent years has bolstered the RNAV concept. Although the immediate effect of the proposed amendments would be to permit the increased application of GPS, the language has been drafted in terms that should be sufficiently flexible to incorporate new technologies as they become available and are approved for use.

The proposed amendments would allow fixes authorized in the instrument approach procedure, or airport surveillance radar (ASR) to be substituted for the outer marker. Advances in aircraft positioning technology have made these substitutes for the outer marker practical.

The proposed amendments would eliminate the middle marker as a required component of the ILS. In 1992, the FAA completed an evaluation of the operational effectiveness and safety benefits provided by a middle marker during ILS operations ¹. The evaluation concluded that a middle marker makes no significant difference in pilot performance,

¹ Middle Marker Evaluation Project, Final Report, Carl F. Moore, DoT, FAA, Mike Monroney Aeronautical Center, DOT/FAA/AVN-500-61, June 1992.

while conducting an ILS approach. The FAA has determined that middle markers are redundant and are no longer needed for safety.

The proposed amendments would add sections that would codify current practice and therefore would impose no costs. The new sections are as follows:

- Section 129.16 would apply to foreign rotorcraft operators. The section would require equipment for rotorcraft operations under VFR over routes navigated by pilotage. The FAA believes that foreign air carriers that would be covered by this provision are already equipped with the required communication and navigation equipment and that therefore the proposed rule would impose no costs. However, the FAA calls for comments on whether this proposed section would impose costs.
- Section 135.78 would not allow persons to make an instrument approach unless it was in accordance with IFR weather minimums and instrument approach procedures that are set forth in their operations specifications. The identical requirement currently exists in sections 121.567 and 125.325 and codifies current practice.

The proposed amendments would also add language to existing sections that would codify current practice and therefore would impose no or negligible costs. These changes include the following:

- Section 91.205 currently requires DME for aircraft required to be equipped with VOR flying at or above 24,000 feet MSL. The proposed amendments extend the requirement to aircraft that operate down to 18,000 feet MSL to align the operating rule with current airspace designations. The FAA believes that most of the affected aircraft are already equipped with DME and therefore this amendment reflects current practice.
- Section 91.711 currently requires DME for foreign civil aircraft required to be equipped with VOR flying within the U.S. at or above 24,000 feet. The proposed amendments would extend the requirement to aircraft that operate down to 18,000 MSL. The FAA believes that most of the affected aircraft are already equipped with DME and therefore this amendment reflects current practice.
- The proposed amendments adds language to section 121.99 that codifies a legal interpretation of the term rapid communications as "the caller must be able to establish communications with the called party in less than four minutes." We believe this is current practice and are calling for comments from the public. Further, in section 121.99 the proposal adds a requirement for two-way voice communication capability. Aircraft currently have two-way voice communications. The language proposed here is broader than the current language to allow for advanced technologies such as data link. The purpose for adding the requirement for two-way voice communications is to ensure that advanced technology not substitute for two-way voice communications, since it is necessary to ensure safety in non-normal and emergency operating conditions.

- The proposed amendments added language to section 129.17 to require foreign air carriers to conduct IFR and over the top operations with two independent communication and navigation systems. The FAA believes that this is current practice, but calls for comments from the public. In addition, the proposed amendments to this section require DME or IFR-approved RNAV systems equipment if VOR navigation equipment is required by this section regardless of altitude, whereas the current rule requires that aircraft be equipped with DME (if VOR equipment is required) when operated at or above 24,000 feet. The FAA believes that these aircraft are for the most part, all equipped with DME. There may be a small number of rotorcraft that operate between the U.S. and either Mexico or Canada that are not DME equipped. If this is so, there might be a small, negligible increase in costs to foreign air carriers in order to achieve the enhanced safety that would result from extending the DME requirement. The FAA calls for comments from the public on this. The FAA believes that aircraft flying under part 129 are already equipped with equipment that exceed this minimum proposed requirement and that this requirement is merely a codification of current practice.

- The FAA proposes revising the definition of "night" in section 1.1 to reflect that local night may differ from the times published in the American Air Almanac. This would allow the FAA to limit operations at a particular location where night might be earlier than published in the Almanac because of terrain. The purpose would be to enhance safety and the FAA does not foresee any costs. The FAA expects that this could occur at a very small number of airports in the U.S. and might cause slight operational limitations to a small number of flights. The FAA calls for comments on how this might affect operations and if there might be any cost impacts.

These additions would not impose costs because the proposal does not differ from the current practice. Actually, they may reduce costs since codification enhances clarity, which would imply lower costs.

III. Major Assumptions

1. All monetary values are expressed in 2001 dollars.
2. The time horizon for the analysis is 16 years (2003 to 2018).
3. Costs are discounted at 7% to 2002.
4. Half the middle markers would be decommissioned at the end of 2003 under the assumption that the proposed rule would become effective in January 2003 and that it would take almost a year to acquire funding for the decommissioning. The other half would be decommissioned at the end of 2004.
5. Operating cost savings of no longer having to operate half the middle markers begin in January of 2004.
6. Full operating cost savings begin in January 2005 once the middle markers are fully decommissioned.
7. Pre-test facilities and non-federal facilities cost the same to operate as commissioned facilities.

IV. The Benefits and Costs

The proposed rule would expand the use of area navigation systems to allow for technological advances that support RNAV, such as the Global Positioning System (GPS), while retaining the current ground-based systems. Aircraft operators would thereby have the option to use satellite-based navigation, but may also choose to continue using the current ground-based systems. The proposed rule would not impose an obligation to change current navigation systems, but rather would expand the options available to the aircraft operator. Therefore, the proposed rule would mandate no costs on aircraft operators.

Because the proposed rule is worded in a way to allow the use of GPS navigation, there may be cost savings associated with the proposal. Cost savings might result because the proposed rule would enable the use of advanced RNAV navigation routes that the FAA has been developing. These routes are typically more direct, and therefore, shorter than the current Federal Airways and jet routes and in following these advanced RNAV routes aircraft may require less fuel and time to reach their destinations.

Advanced area navigation routes have not been planned, so cost savings cannot be reliably estimated at this time. However, the FAA has established a number of test routes. There are estimates of cost savings ascribed to flying these shorter test routes.² These estimates indicate that enabling advanced area navigation could result in substantial cost savings. Airlines have estimated annual cost savings in excess of \$30 million dollars due to flying the advanced RNAV test routes. These cost savings are presented in Table 1.

In addition, the proposed rule would amend the current regulation and eliminate the middle marker as a required ILS component. The proposed rule would result in net cost savings to owners of middle marker facilities who choose to decommission their middle marker facilities. These net cost savings are described below.

The proposed amendments expand the number of acceptable substitutes for the outer marker. This will allow more flexibility in the design of future instrument approaches. Costs and cost savings that have been estimated for this regulatory evaluation are associated with the provision in section 91.175 (k) which removes the requirement for the middle marker.

² 2001 ACE Plan, Building Capacity Today for the Skies of Tomorrow, Federal Aviation Administration, Office of System Capacity, prepared jointly by the Federal Aviation Administration and ARP Consulting, L.L.C., December 2001.

Table 1 Estimated Annual Cost Savings from Certain RNAV Route Initiatives

RNAV Route Initiative	Annual Cost Savings
Eastern Region 104 RNAV City Pair routes developed between local air traffic facilities and Atlantic Coast Airlines	\$4.1 million
Western-Pacific and Northwest Mountain Regions with Alaska airlines developed 21 RNAV off-airway direct routes	\$800,000
Southern Region 36 routes principally used by Delta operating 117 flights daily	\$2.6 million ³
The FAA southern region coordinated the establishment of 56 routes to facilitate traffic flow in terminal airspace at request of Atlantic Southeast Airlines	\$2.0 million
Three routes implemented in the northeastern Gulf of Mexico	\$21 million

Cost Savings

Since the proposed rule would eliminate the requirement for the middle marker on instrument landing systems (ILS), the proposal would result in cost savings. The benefits of the proposed rule would be the cost savings to the FAA and owners of non-federal facilities from no longer having to maintain the middle marker facilities. There are currently a total of 672 middle markers including pre-test facilities, commissioned facilities, and non-federal facilities.

TABLE 2 NUMBER OF MIDDLE MARKER FACILITIES

	Middle Markers
Pre-test facilities	4
Commissioned Facilities	630
Non-federal facilities	38
Total middle markers	672

TABLE 3 TOTAL ANNUAL COSTS TO OPERATE COMMISSIONED MIDDLE MARKER FACILITIES

Facility	Maintenance	Electricity	FAALC ⁴ Support	Total
Middle Marker	\$1,531,530	\$128,520	\$488,880	\$2,148,930

³ Projected by Delta Airlines.

⁴ FAA Logistics Center.

The total annual costs to operate commissioned marker facilities were determined for the middle marker facilities (Table 3). These costs were divided by number of tested and commissioned marker sites (630 middle markers) to derive an annual operating cost per commissioned facility (Table 4).

TABLE 4 OPERATING COSTS PER COMMISSIONED MIDDLE MARKER

Per Marker Costs	Maintenance	Electricity	FAALC ⁴ Support	Total
Middle Marker	\$2,431	\$204	\$776	\$3,411

TABLE 5 TOTAL ANNUAL COSTS TO OPERATE MIDDLE MARKERS OR ANNUAL COST SAVINGS OF NOT HAVING TO OPERATE MIDDLE MARKERS UNDER PROPOSED RULE

	Maintenance	Electricity	FAALC Support	Lease Cost	Total
Middle Marker ⁵	\$1,633,632	\$137,088	\$521,472	\$48,613	\$2,340,805

An estimate of the total annual cost of maintenance, electricity and FAALC⁴ support for middle marker facilities (including pre-test and non federal facilities) was determined by multiplying the total number of middle marker facilities (672) by the per facility annual operating cost.

In addition, the FAA pays to lease land for the some middle marker facilities. According to the Lease Information Management System, the FAA paid \$48,613 in 2001 to lease land for the middle markers.^{6, 7} No cost data was available for lease of the land for middle markers by non-federal facilities. An annual lease cost of \$48,613 (to represent lease costs in 2001 dollars) was added to the annual costs of operating the middle marker facilities (Table 5).

Costs

On the other hand, the federal government and non-federal owners of facilities would have to incur some costs to decommission⁸ each marker facility. The cost to decommission a middle marker could range from \$10,000 to \$30,000 per site depending on the type of environmental issues associated with the particular site. These costs would not be imposed by the proposed rule because the owners of the middle marker facilities would not be obligated to decommission the facilities and could choose to continue operating the facilities. However, in order to save operational costs, the markers would have to be decommissioned.

⁵ Includes pre-test and non-federal sites in addition to test & commissioned facilities.

⁶ Lease Information Management System.

⁷ The FAA paid \$48,613 for 56 leases associated with the middle markers. The vast majority of middle marker leases were provided to the FAA at no cost.

⁸ Decommissioning the facilities means restoring the area to its original condition. This is the "worst case" for estimating economic impact.

The actual decommissioning of sites can occur within a year, with the exact time being dependent on the complexity of the site. In this analysis, the FAA assumes that the middle marker facilities would be decommissioned over two years beginning at the end of 2003. The costs would range from \$6.7 million to \$20.2 million. Tables 6 and 7 present the costs of decommissioning the markers and the cost savings from ceasing operations. The analysis assumes that all the middle markers are decommissioned over two years. The net costs would be discounted to 2002.

Net Costs

The government and other owners of the marker facilities would save about \$2.3 million⁹ each year in operations costs once all 672 middle markers are decommissioned. On the other side of the equation, the government and non-federal owners of facilities would pay an estimated total of \$6.7 million on the low side up to a high of \$20.2 million to decommission these marker facilities. The FAA assumes the rule would come into effect in January 2003 and that obtaining funding to cover decommissioning costs would take almost one year. The FAA assumes that once financing is obtained, half the middle marker facilities (336) would be decommissioned immediately, and the other half would be decommissioned the following year. Operating cost savings would begin in 2004. As markers are decommissioned, the owners of the facilities would no longer have to incur costs to operate the facilities. The operating costs can therefore be counted as a cost savings of the rule.

The annual cost savings of \$1.2 million to \$2.3 million are factored in as a negative cost. Cumulative discounted cost savings would exceed cumulative discounted costs in four¹⁰ to fourteen years¹¹ after decommissioning begins. By 2007, discounted cumulative cost savings would surpass the discounted costs of decommissioning the facilities given the low cost of decommissioning (Table 6). For the upper limit on the cost of decommissioning the facilities, the discounted cumulative cost savings would not exceed the discounted cumulative costs until 2017 (Table 7).

Conclusion

The proposed rule would expand the use of area navigation systems while retaining the current ground-based systems. Aircraft operators would thereby have the option to use satellite-based navigation systems, but may also choose to continue using the current ground-based systems. The proposed rule would not impose an obligation to change current navigation systems, and therefore it would impose no costs on aircraft operators.

The proposed rule would also eliminate the middle marker as a required ILS component. There would be an estimated cost savings to those who operate the marker sites (most markers are operated by the government) of \$34 million over the first 15 years should

⁹ Savings would be \$1.2 million in the first year since half the markers would be decommissioned

¹⁰ If the low decommissioning cost is used.

¹¹ If the high decommissioning cost is used.

they all remove the middle markers. The proposed rule would also impose a cost on the site operators should they choose to remove the middle markers. In order for the markers to be removed, they would have to be decommissioned. Total costs to decommission the middle markers would range from \$6.7 million using the low estimate to \$20.2 million using the high estimate. The proposed rule would result in a net cost savings (where cumulative cost savings would exceed cumulative costs) by the 4th year (if the decommissioning costs are the low estimate) or by the 14th year (if costs are the high estimate).

TABLE 6 ANNUAL AND CUMULATIVE COST OF THE PROPOSED RULE USING THE LOW COST OF DECOMMISSIONING¹²

Year	Non-discounted Decommissioning Costs	Present Value Factor (7%) ¹³	Discounted Decommissioning Costs	Annual Non-discounted Operating Costs ¹⁴	Present Value Factor (7%) ¹⁵	Discounted Operating Costs	Total Non-Discounted Cost	Total Annual Net Cost ¹⁶ Discounted	Discounted Cumulative Net Cost ¹⁶
2002	\$0	1	\$0	\$0	1.0000	\$0	\$0	\$0	\$0
2003	\$3,360,000	0.9346	\$3,140,256	\$0	0.9669	\$0	\$3,360,000	\$3,140,256	\$3,140,256
2004	\$3,360,000	0.8734	\$2,934,624	-\$1,170,403	0.9037	-\$1,057,693	\$2,189,598	\$1,876,931	\$5,017,187
2005	\$0	0.8163	\$0	-\$2,340,805	0.8445	-\$1,976,810	-\$2,340,805	-\$1,976,810	\$3,040,377
2006	\$0	0.7629	\$0	-\$2,340,805	0.7893	-\$1,847,597	-\$2,340,805	-\$1,847,597	\$1,192,780
2007	\$0	0.7130	\$0	-\$2,340,805	0.7377	-\$1,726,812	-\$2,340,805	-\$1,726,812	-\$534,032
2008	\$0	0.6663	\$0	-\$2,340,805	0.6894	-\$1,613,751	-\$2,340,805	-\$1,613,751	-\$2,147,783
2009	\$0	0.6227	\$0	-\$2,340,805	0.6443	-\$1,508,181	-\$2,340,805	-\$1,508,181	-\$3,655,963
2010	\$0	0.5820	\$0	-\$2,340,805	0.6022	-\$1,409,633	-\$2,340,805	-\$1,409,633	-\$5,065,596
2011	\$0	0.5439	\$0	-\$2,340,805	0.5628	-\$1,317,405	-\$2,340,805	-\$1,317,405	-\$6,383,001
2012	\$0	0.5083	\$0	-\$2,340,805	0.5259	-\$1,231,029	-\$2,340,805	-\$1,231,029	-\$7,614,031
2013	\$0	0.4751	\$0	-\$2,340,805	0.4915	-\$1,150,506	-\$2,340,805	-\$1,150,506	-\$8,764,536
2014	\$0	0.4440	\$0	-\$2,340,805	0.4594	-\$1,075,366	-\$2,340,805	-\$1,075,366	-\$9,839,902
2015	\$0	0.4150	\$0	-\$2,340,805	0.4293	-\$1,004,908	-\$2,340,805	-\$1,004,908	-\$10,844,810
2016	\$0	0.3878	\$0	-\$2,340,805	0.4012	-\$939,131	-\$2,340,805	-\$939,131	-\$11,783,941
2017	\$0	0.3624	\$0	-\$2,340,805	0.3745	-\$876,631	-\$2,340,805	-\$876,631	-\$12,660,572
2018	\$0	0.3387	\$0	-\$2,340,805	0.3504	-\$820,218	-\$2,340,805	-\$820,218	-\$13,480,790
Total	\$6,720,000		\$6,074,880	-\$33,941,673		-\$19,555,670	-\$27,221,673	-\$13,480,790	

¹² There may be some discrepancy in results due to round-off error.

¹³ End of period discount factor.

¹⁴ The annual costs to operate the facilities are multiplied by -1 because once the facilities are removed these costs would no longer be incurred, therefore these costs would be considered a cost savings of the rule.

¹⁵ Continuous compounding discount factor.

¹⁶ Negative costs indicate a cost savings attributable to the proposed rule.

TABLE 7 ANNUAL AND CUMULATIVE COST OF THE PROPOSED RULE USING THE HIGH COST OF DECOMMISSIONING¹⁷

Year	Non-discounted Decommissioning Costs	Present Value Factor (7%) ¹⁸	Discounted Decommissioning Costs	Annual Non-discounted Operating Costs ¹⁹	Present Value Factor (7%) ²⁰	Discounted Operating Costs	Total Non-Discounted Cost	Total Annual Net Cost ²¹ Discounted	Discounted Cumulative Net Cost ²¹
2002	\$0	1	\$0	\$0	1.0000	\$0	\$0	\$0	\$0
2003	\$10,080,000	0.9346	\$9,420,768		0.9669	\$0	\$10,080,000	\$9,420,768	\$9,420,768
2004	\$10,080,000	0.8734	\$8,803,872	-\$1,170,403	0.9037	-\$1,057,693	\$8,909,598	\$7,746,179	\$17,166,947
2005		0.8163		-\$2,340,805	0.8445	-\$1,976,810	-\$2,340,805	-\$1,976,810	\$15,190,137
2006		0.7629		-\$2,340,805	0.7893	-\$1,847,597	-\$2,340,805	-\$1,847,597	\$13,342,540
2007		0.7130		-\$2,340,805	0.7377	-\$1,726,812	-\$2,340,805	-\$1,726,812	\$11,615,728
2008		0.6663		-\$2,340,805	0.6894	-\$1,613,751	-\$2,340,805	-\$1,613,751	\$10,001,977
2009		0.6227		-\$2,340,805	0.6443	-\$1,508,181	-\$2,340,805	-\$1,508,181	\$8,493,797
2010		0.5820		-\$2,340,805	0.6022	-\$1,409,633	-\$2,340,805	-\$1,409,633	\$7,084,164
2011		0.5439		-\$2,340,805	0.5628	-\$1,317,405	-\$2,340,805	-\$1,317,405	\$5,766,759
2012		0.5083		-\$2,340,805	0.5259	-\$1,231,029	-\$2,340,805	-\$1,231,029	\$4,535,729
2013		0.4751		-\$2,340,805	0.4915	-\$1,150,506	-\$2,340,805	-\$1,150,506	\$3,385,224
2014		0.4440		-\$2,340,805	0.4594	-\$1,075,366	-\$2,340,805	-\$1,075,366	\$2,309,858
2015		0.4150		-\$2,340,805	0.4293	-\$1,004,908	-\$2,340,805	-\$1,004,908	\$1,304,950
2016		0.3878		-\$2,340,805	0.4012	-\$939,131	-\$2,340,805	-\$939,131	\$365,819
2017		0.3624		-\$2,340,805	0.3745	-\$876,631	-\$2,340,805	-\$876,631	-\$510,812
2018		0.3387		-\$2,340,805	0.3504	-\$820,218	-\$2,340,805	-\$820,218	-\$1,331,030
Total	\$20,160,000		\$18,224,640	-\$33,941,673		-\$19,555,670	-\$13,781,673	-\$1,331,030	

¹⁷ There may be some discrepancy in results due to round-off error.

¹⁸ End of period discount factor.

¹⁹ The annual costs to operate the facilities are multiplied by -1 because once the facilities are removed these costs would no longer be incurred, therefore these costs would be considered a cost savings of the rule.

²⁰ Continuous compounding discount factor.

²¹ Negative costs indicate a cost savings attributable to the proposed rule.

V. Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation.” To achieve that principle, the Act requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The Act covers a wide-range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the Act.

However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 Act provides that the head of the agency may so certify and a Regulatory Flexibility Analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

This proposed rule may effect those privately owned small airports which would be allowed to decommission their middle marker facilities under the proposed rule. There are an estimated 38 non-federal middle marker facilities. For the purposes of this regulatory flexibility determination, the FAA assumes that all 38 middle marker facilities are at airports operated by small entities. The estimated cost to decommission a middle marker facility ranges from \$10,000 to \$30,000 per facility. On the other hand, the non-federal navigation facilities would save operating costs by no longer having to maintain and operate these middle marker facilities. These savings would be an estimated \$3,400²² annually per facility. Over a period of fifteen years, each facility would save \$51,000 in operating costs if it decommissioned its middle markers. However, the proposed rule would not mandate that the middle marker facilities be decommissioned. The private facility owners would not be required to decommission their facilities, therefore they would only do so if they believed it to be cost-beneficial to do so. Consequently, the FAA certifies that the rule would not have a significant economic impact on a substantial number of small entities.

VI. International Trade Impact Analysis

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce

²² This excludes lease cost savings because data on lease costs were unavailable for non-federal facilities.

of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

The NPRM proposes to impose requirements on foreign air carriers operating in the U.S. that would mirror the communication and navigation equipment requirements placed on domestic U.S. air carriers operating in the U.S. This would mean that the requirements imposed on foreign air carriers operating in the U.S. would be consistent with those that are imposed on U.S. commercial operators and air carriers operating domestically. For example, proposed sections 121.349, 125.203, and 135.165 would impose substantially the same communication and navigation system requirements for operations in the U.S. under IFR or over the top as is proposed in section 129.17 for foreign air carriers who conduct IFR or over the top operations in the U.S. Therefore, the FAA has determined that the proposed rule would have a neutral impact on foreign trade and, therefore, create no obstacles to the foreign commerce of the United States.

VII. Unfunded Mandate Assessment

The Unfunded Mandates Reform Act of 1995 (the Act), enacted as Pub. L. 104-4 on March 22, 1995, is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments.

Title II of the Act requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in a \$100 million or more expenditure (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action."

This proposed rule does not contain such a mandate. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do not apply.